

Operational Environmental Management Plan (OEMP)

Rutherford Refinery – 41 Kyle St, Rutherford NSW

Date: April 2024
Prepared by: Cleanaway
Updated by: Cleanaway
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Revision History

Rev	Date	Review Trigger	Details of changes	Certified by:	
				Name	Title
Draft	14/09/2006	-	-	Tibor de Jong	-
1	03/03/2007	-	-	Stuart Douglas	-
2	09/05/2007	-	-	Stuart Douglas	-
3	11/05/2007	-	-	Stuart Douglas	-
4	27/06/2019	2018 IEA	Update Draft of OEMP manual	Bart Downe	Environmental Business Partner
5	30/06/2022	2021 IEA	Update OEMP	Scott McLeod	Regional Manager – Refineries
6	21/04/2023	2022 AEMR	Update OEMP	Scott McLeod	Regional Manager – Refineries
7	10/04/2024	2023 AEMR	Update OEMP	Scott McLeod	Regional Manager – Refineries

Abbreviations

Abbreviation	Term
AQMP	Air Quality Management Plan
Cleanaway	Cleanaway Pty Ltd
Council	Maitland City Council
DPE	Department of Planning and Environment
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
ERP	Emergency Response Plan
GWMP	Groundwater Management Plan
H ₂	Hydrogen
LGA	Local government area
MMMs	Management and mitigation measures
N ₂	Nitrogen
NSW	New South Wales
OEMP	Operational Environmental Management Plan
PIRMP	Pollution Incident Emergency Response Plan
SOP	Standard Operating Procedure
the 'Site'	Cleanaway Refinery located at 41 Kyle Street, Rutherford, NSW
tpa	Tonnes per annum

1. Introduction

This Operational Environmental Management Plan (OEMP) has been prepared for Cleanaway Pty Ltd (Cleanaway) to identify and provide management solutions for potential environmental impacts arising from the operation of the Cleanaway Refinery located at 41 Kyle Street, Rutherford, New South Wales (NSW) (the 'Site').

The Site was initially granted project approval PA 05_0037 on 4 July 2006 for the construction and operation of a resource recovery and recycling facility.

Project Approval MP05_0037 was modified on six occasions between 2006 and 2023. This included the following modifications:

- Modification 1 (MOD 1): Construction of additional plant to improve the quality of the final waste oil product, determined 16 May 2007;
- Modification 2 (MOD 2): Modification of monitoring requirements to ensure consistency with the EPL, determined 18 October 2011;
- Modification 4 (MOD 4): replacement of the stack at monitoring point 19, determined 10 December 2014;
- Modification 5 (MOD 5): Construction and operation of new equipment (oil polishing system, multi-fuel burner, six additional oil storage tanks with total combined storage of 2.4 ML and safety and fire-fighting systems) and increase the height of the Multi-Fuel Burner Stack, to enable the facility to produce both Class I and Class II product oils, determined 9 September 2016;
- Modification (MOD 6): Construction and operation of a Mobile Oil Polishing Plant (MOPP) for a trial period of 30 months, determined 20 August 2021; and
- Modification (MOD 7): Construct an additional waste gas stack to separate emission flow from the existing stack into two distinct emission points, determined 11 October 2023.

Please note, Modification 2¹ for the relocation of oil storage tanks was withdrawn. Works associated with MOD 5 have not commenced, while MOD 6 is still within the trial period².

1.1 Scope

The scope of this OEMP includes the operational activities undertaken by Cleanaway employees, contractors and subcontractors at the Cleanaway Rutherford Refinery (as shown in **Figure 3**) and consideration of how these activities relate to the protection of the environment.

For information on emergency response protocols, work, health and safety plans and asbestos management refer to the following documents:

- Emergency Response Plan (ERP) / Site Emergency Management Plan (SEMP)
- Pollution Incident Emergency Response Plan (PIRMP)
- Site Asbestos Management Plan and Asbestos Register

1.2 Objectives

The objectives of this OEMP are to:

- Provide a comprehensive overview of the environmental management strategy for site operations.
- Ensure that potential environmental impacts associated with the site operations are identified along with management solutions.

¹ It is noted that there are two separate modifications called Modification 2, as result there is no Modification 3.

² In November 2023, a 24-month extension was provided to CWY by DPE, and the trial period is effective until November 2025. This extended the initial 30-month trial period.

1.3 OEMP Sub Plans

Controls measures for environmental management at the Site are outlined in this OEMP and the following site environmental management sub-plans required under Project Approval 05_0037:

- Groundwater Management Plan (GWMP)
- Air Quality Management Plan (AQMP)
- Transport Code of Conduct (TCC)

Further to the environmental management sub-plans required under Project Approval 05_0037, Cleanaway also maintain a separate Stormwater Management Plan (SWMP) for the Rutherford Refinery site.

2. Compliance Requirements

2.1 Conditions of Consent

This OEMP has been prepared to meet the requirements of Condition 3.5 of PA 05_0037, to prepare and implement an OEMP for the operations at the Site.

Specific approval conditions that are applicable to this OEMP are outlined below.

Table 1: PA 05_0037 OEMP Condition of Approval

Condition	Requirement	Reference Section
3.5	Prior to the commencement of operations, the Proponent shall prepare (and following approval implement) an Operation Environmental Management Plan (OEMP) for the project, in consultation with the EPA, DPE, and Council), and to the satisfaction of the Planning Secretary. This plan must describe the environmental management framework, practices and procedures that would be followed during operations, and include:	This plan
(a)	Identification of all statutory and other obligations that the Proponent is required to fulfil in relation to operation of the development, including all approvals, licenses, and consultations.	Section 2
(b)	A description of the roles and responsibilities for all relevant employees involved in the operation of the development;	Section 5
(c)	Overall environmental policies and principles that will be/are applied to the operation of the development;	Section 4 Attachment A
(d)	Standards and performance measures that will be applied/are to the development, and a means by which environmental performance can be periodically reviewed and improved;	Section 6 Section 7 Section 8
(e)	Management policies to ensure that environmental performance goals are met and to comply with the conditions of this approval;	Section 6
(f)	Details of all landscaping to be undertaken on the site;	Section 6.3
(g)	The various management plans required under this approval; and	Attachment C Attachment D Attachment E
(h)	Contingency measures should monitoring of environmental issues under this approval indicate that the development has had, or is having an adverse environmental impact.	Section 8
	Operations shall not commence until the Secretary has approved the OEMP. Upon receipt of the Secretary's approval, the Proponent shall supply a copy of the OEMP to the EPA and Council as soon as practicable.	Section 2.2

Condition	Requirement	Reference Section
3.6	The OEMP for the project shall include the following Management Plans:	
(a)	<p>An Air Quality Management Plan outlining the measures that would be implemented to minimise and manage air quality impacts of the proposal, particularly odour. The Plan shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) Identification of all point and diffuse sources or air quality emissions associated with the project; ii) A detailed description of the mitigation methods and management practices that would be used throughout the project, particularly methods to ensure offensive odour impacts do not occur off site, and a demonstration that these measures are consistent with industry best practice; iii) A detailed monitoring program for the project; iv) Details of the contingency measures that would be implemented if non-compliance with air quality emissions criteria is detected or if offensive odour impacts occur; and v) A procedure for handling complaints. 	Attachment C
(b)	<p>A Transport Code of Conduct to outline measures to manage all heavy vehicle traffic movements associated with the project to minimise impacts on the local and regional road network, including traffic noise. The Code shall address the requirements of Council and the RTA and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) Restrictions to routes, where relevant; ii) Management measures to reduce volumes of heavy vehicles travelling to and from the site during peak hours, particularly B-Double movements at the Kyle Street/New England Highway intersection during peak hours; and iii) Details of what disciplinary actions would be taken should any non-compliance with the Transport Code of Conduct be detected. 	Attachment D
(c)	<p>A Groundwater Management Plan to detail measures to monitor, and where applicable, manage the impact on groundwater. The Plan shall be prepared in consultation with DPE and EPA, and shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) Details of baseline groundwater quality, as present prior to the commencement of construction of the development; ii) Groundwater assessment criteria for a broad range of parameters, including heavy metals, total nitrogen and total phosphorous; iii) Monitoring program of groundwater quality, including frequency of monitoring and monitoring locations; iv) Details of contingency measures and management options should monitoring of groundwater quality indicate that the development has had, or is having, and adverse effect on groundwater quality; v) Details of the nominated contingency measures and management options, should monitoring of groundwater quality indicate that the development has exceeded these criteria. These levels and contingency and management options must be developed to the satisfaction of the EPA and DPE. 	Attachment E

2.2 Consultation and Correspondence

In accordance with PA 05_0037, **Table 2** lists the regulatory authorities which were consulted and/or approved the preparation of the OEMP and associated sub plans.

Table 2: OEMP and Sub Plan Consultation and Approval Requirements

Management Plan	Condition	Consultation	Approval Requirements
OEMP	PA 05_0037 Condition 3.5	EPA DPE Council	To the satisfaction of the DPE - Secretary
AQMP	PA 05_0037 Condition 3.6a	EPA DPE Council	-
Transport Code of Conduct	PA 05_0037 Condition 3.6b	EPA DPE Council	-
GWMP	PA 05_0037 Condition 3.6c	EPA DPE Council	-
SWMP	N/A	N/A	Internal CWY document

The previous version of this plan (i.e. Rev6) was provided to DPE, Council and EPA for further consultation in April 2023. No comments were received on the OEMP from any agencies.

Following the completion of internal reviews, this version of the OEMP (i.e. Rev7) will also be supplied to the above agencies.

2.3 Legislative Requirements

Other approvals, consents, permits and licences apply to the operations of the Site are summarised in **Table 3**. Copies of Permits, Licences and Approvals relevant to Site activities will be kept on site.

Table 3: Legislative Requirements

Legislation	Approval	Agency	Activity
Protection of the Environment Operations Act 1997	Environment Protection Licence (EPL No.12555)	NSW EPA	Chemical storage waste generation; and Petroleum products and fuel production.
Hunter Water's Moderate Trade Wastewater General Conditions and Trade Wastewater Policy	Trade Waste Agreement Consent No.2006-978/27	Hunter Water	Discharge of wastewater to sewer.
Work Health and Safety Act 2011 and Regulation 2017	Hazardous Chemicals Notification	SafeWork NSW	Storage of hazardous chemicals.

Legislation	Approval	Agency	Activity
	Acknowledgment No. NDG037591		

Cleanaway is subject to legislative requirements set out in State and Commonwealth legislation and regulations. These are listed within a *‘Legal and Other References’* corporate level document. In addition, the register includes a *‘Site specific register’* which identifies the State legislative requirements and applicable approvals, consents and licences for each site.

A Compliance Tool is also used to track compliance of the Site’s operations against the EPL. Information from the above registers is used to compile an audit table of compliance which is included in the Annual Environmental Management Report (AEMR) for the Site.

3. Project Description

3.1 Site Description and Layout

The Site is located in the Rutherford Industrial Estate, approximately 5 km north/west of Maitland. The Site is located within the Maitland City Council local government area (LGA) (refer to **Figure 1**). The refinery has been operational since May 2007.

The site topography is flat and primarily devoid of any significant vegetation with the exception of some boundary tree plantings along the western boundary. A large portion of the site is undeveloped grassland with the existing facility concentrated on the western end of the site. The site is located on Lot 223 DP 1037300.

The nearest residential area is located in Rutherford, with the closest receptors approximately 1 km from the Site.

The refinery processes up to 40,000 tonnes per annum (tpa) of re-refined waste oil. This waste oil is refined via hydrogenation into base oil for use in lube oil blending and industrial processes.

The site operates 24 hours a day, 7 days a week with a workforce of up to 35. Major components of the Site include:

- Hydrogenation plant
- Hydrogen (H₂) plant
- Nitrogen (N₂) plant
- Cooling towers
- Storage tanks
- Control room and office building
- Workshop
- Process store
- Truck unloading and loading bays
- Mobile Oil Polishing Plant (MOPP)

Activities and operations required for the receipt, storage, processing and supply of refined oils are outlined in the Standard Operating Procedures (SOPs) for the Site.

As part of the waste management and recycling operations, Cleanaway Rutherford forms a key part of the closed loop used oil recycling business, by providing the facilities to return oil and lubricants to base oil quality for purchase and reuse in the marketplace. Other facilities located throughout the east coast support the Rutherford site in the collection, initial cleaning/processing, and transportation of waste and base oils.



Figure 1: Cleanaway Rutherford in the context of the broader Cleanaway operations

3.2 Surrounding Land Use

As shown in **Figure 2**, the Site is located within the Rutherford Industrial Estate which contains a number of industrial businesses. Industrial land uses immediately surrounding the site can be summarised as:

- North – Industrial land uses
- South – Industrial land uses

West – Vacant vegetated land and Industrial land uses; and

- East – Primarily vacant industrial land (Cleanaway site).

The nearest residential area is located in Rutherford, with the closest receptors approximately 1 km from the site.

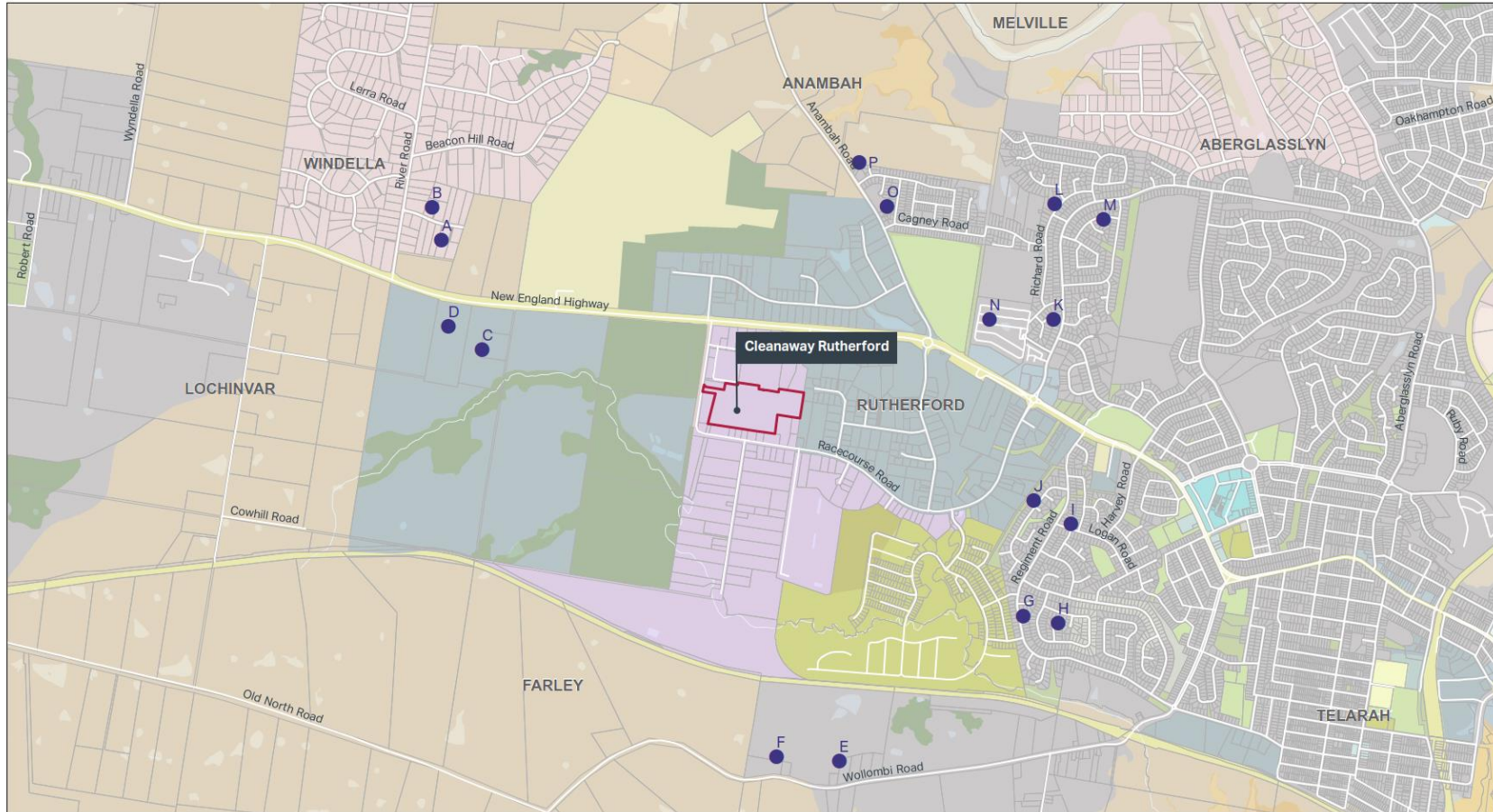


FIGURE 2: SITE LOCATION



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Figure 2: Location of the Site

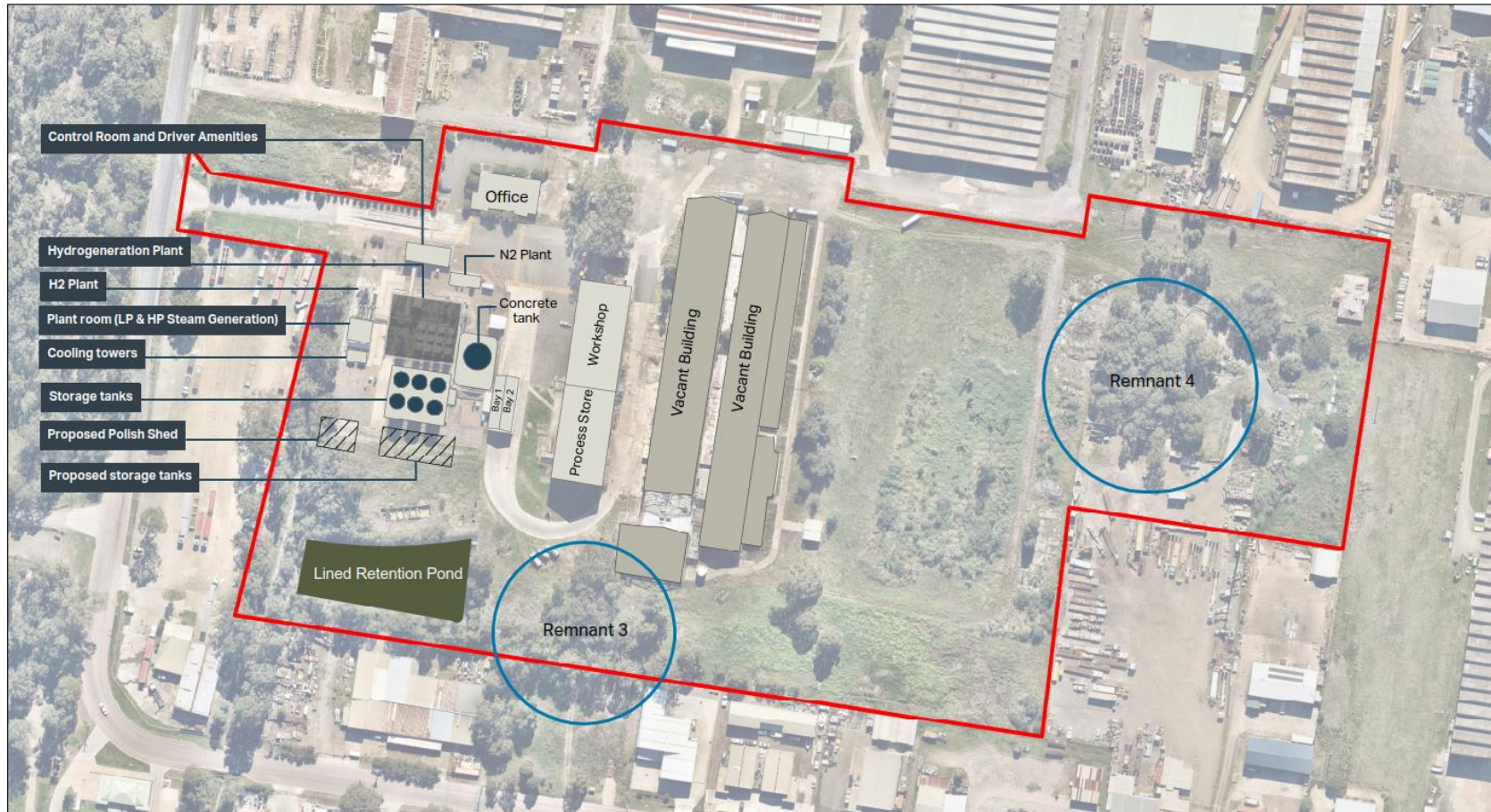


FIGURE 3: SITE LAYOUT

Legend

Site boundary

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Figure 3: Site layout (Note, “proposed” infrastructure relates to MOD 5 approval)

4. Environmental Management System

The Site operates in accordance with the Cleanaway group wide Environmental Management System (EMS). This group wide EMS is certified to international standard ISO 14001, by BSI Global.

The EMS applies to all Cleanaway employees and contractors, at all Cleanaway and Client sites and on public roads where Cleanaway operates. The EMS applies to the following activities:

- The provision of waste management services for the collection, transportation, recycling, recovery, disposal of hazardous and non-hazardous liquid waste, solid, industrial, commercial, medical and municipal waste, landfill management and production of recovered material products; and
- The provision of industrial solutions in the field of facilities management, site remediation, high pressure water jetting, dredging, vacuum loading, graffiti removal, CCTV, protective coatings and bio-solids management.

The EMS is also used in the above context to support the tender and client customer service process, including managing client and stakeholder expectations in terms of identifying and progressing opportunities and sustainable practices with clients.

A copy of the Cleanaway Environmental Policy is provided in **Attachment A**.

4.1 Site Environmental Risk Register

Cleanaway maintain an Environmental Risk Register for the Rutherford Refinery site. Potential environmental risks and impacts associated with the site are summarised in **Attachment F**. Establishment of the level of risk to the environment associated with the activities undertaken at the site has been determined based on the following criteria:

- The likelihood that a potential environment impact will occur, if the activity is not managed;
- The consequence to the environment if the impact were to occur; and
- Applying the risk matrix below to assess the level of risk associated with the activities undertaken at the site.

Table 4 shows the risk matrix and risk rating applied to identified environmental aspects and impacts.

4.1.1 Review and Update of Environmental Risk Register

The Environmental Risk Register will be reviewed periodically (generally annually) and updated to include newly identified site-specific risks. This review may occur following a major incident, following a series of minor repeat incidents or complaints and/or following audit findings.

Table 4: Cleanaway Risk Score Matrix

Table 1: Consequence Categories

Consequence Category	People	Environment (Impact)	Assets (fixed or mobile)	Reputation	Compliance	Finance
SIGNIFICANT (A)	Multiple fatalities (public or workers) Severe health impact on the public	>10 years impact to highly valued ecosystem	Long-term or permanent loss or closure of a business-critical site Loss of multiple assets impacting on the viability of the business	Extreme public attention, material and direct impact on share price Loss of long-term major customer or large number of customers Increased sustained scrutiny by regulators nationally across the business	Criminal charges against director or senior executive/ manager Significant litigation or inquiry – potential significant damages/ costs/time Court imposed penalties >\$5mil Loss of licence	>= AUD \$25M EBIT
MAJOR (B)	Single fatality and / or total permanent disability (public or worker) Mild but widespread health impacts on the public	1-10 years impact to a highly valued ecosystem >10 years impact to an ecosystem	Loss of assets at a business-critical site such that its operations are closed or severely restricted for the foreseeable future	National impact - National public concern Loss of one or a few customers Increased scrutiny by regulators to multiple sites or states	Major litigation – potential major damages/ costs Court imposed penalties \$1-5mil Suspension or restriction on licence to operate	>=AUD \$10M to <AUD \$25M EBIT
SERIOUS (C)	Serious injury, illness or disability (public or worker), or incident resulting in a lost time injury Serious injury or illness to a member of the public Widespread serious odour/ noise impacts	<1 year impact to a highly valued ecosystem 1-10 years impact to an ecosystem	Loss of assets at a non-business-critical site such that its operations are closed or severely restricted for the foreseeable future	Considerable impact - Regional public concern Customer unease Increased scrutiny by regulator to one or a few sites	Serious non-compliance with licence Litigation – (except above) Court imposed penalties <\$1mil	>=AUD \$5M to AUD <\$10M EBIT
MODERATE (D)	Injury or illness to worker requiring medical treatment outpatient treatment Localised/short-term severe odour/dust/ noise impacts	<1 year impact to an ecosystem	Major damage to asset Some disruption to operations	Limited impact - Local public concern Customers impacted by event, with minor damage to relationship	Direction notice, infringement, or official warning from regulator Moderate non-compliance with regulatory, contractual, or other legal obligations Litigation possible	>=AUD \$1M to AUD <\$5M EBIT
MINOR (E)	Injury or illness to worker requiring first aid or no treatment Mild and infrequent odour/ dust/noise impacts	No immediate impact to ecosystem	Minor vandalism or damage to asset No disruption to operations	Slight impact - Public awareness may exist but no public concern Customers affected by event, with little to no impact to relationship	Minor non-compliance with regulatory, contractual or other legal obligations (except above)	AUD \$0k – AUD < \$1M EBIT

Table 2: Likelihood Categories

Likelihood Category	RARE	UNLIKELY	POSSIBLE	LIKELY	ALMOST CERTAIN
Experience / Frequency	Has occurred once or twice in the waste industry in the last 10 years	Has occurred multiple times in the industry, but not at Cleanaway in the last 10 years	Has occurred at least once at Cleanaway in the last 10 years	Has occurred less than once per year at Cleanaway in the last 10 years	Has occurred at least once per year at Cleanaway in the last 10 years
Probability of occurrence	May occur in exceptional circumstances in the next 3 years (<1%)	Unlikely to occur in the next 3 years (<10%)	Could possibly occur in the next 3 years (<40%)	Likely to occur in the next 3 years (40-80%)	Expected to occur in the next 3 years (>80%)

Table 3: Risk Matrix

	A	H	V	E	E	E
SIGNIFICANT	A	H	V	E	E	E
MAJOR	B	M	H	V	V	E
SERIOUS	C	M	M	H	H	V
MODERATE	D	L	L	M	M	H
MINOR	E	L	L	L	M	M
Consequence	↑	1	2	3	4	5
Likelihood	→	RARE	UNLIKELY	POSSIBLE	LIKELY	ALMOST CERTAIN
Risk Rating						
	Extreme (E)	Very high (V)	High (H)	Medium (M)	Low (L)	

5. Roles and Responsibilities

The roles and responsibilities for the Site are outlined in **Table 5**.

In accordance with PA 05_0037, Condition 3.1 an Environmental Representative for the Site has been endorsed by the DPE. The Environmental Representative will be employed throughout the operations of the Site and should any changes to the appointment occur the DPE will be notified.

Table 5: Roles and responsibilities

Title	Name and Contact Details	Responsibility
Regional Manager (Environmental Representative)	Scott McLeod 0418 736 921	<ul style="list-style-type: none"> ➤ Overall site environmental management and due diligence. ➤ Direct activities in accordance with this OEMP. ➤ Reporting under this OEMP (including emergency response notification). ➤ Approval of OEMP revisions. ➤ The primary contact point in relation to the environmental performance of the project. ➤ Responsible for environmental requirements under PA 05_0037. ➤ Ensure that all site personnel, including visitors, are appropriately inducted and comply with requirements of this OEMP. ➤ Compliance with permits, local council guidelines and regulatory requirements. ➤ Authorised to approve environmental compliance works to be undertaken. ➤ Authorised to identify and approve funding (operational expenditure to implement environmental compliance works). ➤ Authorised to approve emergency and incident response works and funding. ➤ Community consultation. ➤ Works with the Environmental Business Partner and Senior Environmental Business Partner to support improvement processes, strategies and new projects. ➤ Reporting non-conformance or corrective actions to third party stakeholders.
Engineer	Nick Welbourne 0435 968 176	<ul style="list-style-type: none"> ➤ Oversees and collates the daily, weekly and monthly monitoring of environmental performance data as required by the OEMP. ➤ Coordinates contractors involved in the delivery of environmental services required by the EPL or EMP's. ➤ Assists Refinery Operations team in the management of waste for on-site or off-site disposal, as required. ➤ Assists in the receiving and responding to complaints. ➤ Works with the Environmental Business Partner and Senior Environmental Business Partner to support improvement processes, strategies and new projects. ➤ Reporting to the Regional Manager on performance of this OEMP and improvement opportunities. ➤ Implementation of environmental/compliance work programs.

Title	Name and Contact Details	Responsibility
		<ul style="list-style-type: none"> ➤ Authorised to identify and develop yearly budgets for environmental works. ➤ Operating and maintenance of the environmental control equipment (e.g. interceptors etc). ➤ Ensure that all site personnel are aware of any changes to this OEMP. ➤ Approval of any chemicals entering the site.
Senior Environmental Business Partner	Orhan Cambaz 0407 923 305	<ul style="list-style-type: none"> ➤ Responsible for considering and advising on matters specified in PA 05_0037, and all other licenses and approvals related to the environmental performance and impact of the project. ➤ Responsible for the assessment, investigation and response to environmental issues (e.g. internal and external complaints, odour complaints, new projects, etc.). ➤ Provision of professional environmental advice and services, including engagement of environmental contractors / consultants where required. ➤ Has the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur. ➤ Liaises with local council or state regulators on behalf of Cleanaway when required by Refinery Operations and the Regional Manager. ➤ Development of environmental/compliance work programs.
Environmental Business Partner	Haydn Rossback 0499 334 098	<ul style="list-style-type: none"> ➤ Provide support and assistance to review this OEMP and associated documents, including distribution to site. ➤ Provision of professional environmental advice and services, including engagement of environmental contractors / consultants where required. ➤ Provide support and assistance to deliver appropriate environmental awareness training. ➤ Maintains data required by the site's EPL and Consent Conditions, ensuring all actions leading to non-compliance are investigated, solutions developed and implemented, to prevent recurrence of environmental incidents. ➤ Implementation of the corrective action procedure (refer to section 8) ➤ Assists in the assessment, investigation and response to environmental issues (e.g. internal and external complaints, odour complaints, new projects, etc.). ➤ Liaises with local council or state regulators on behalf of Cleanaway when required by Refinery Operations and the Regional Manager. ➤ Reporting to the Regional Manager on performance of this OEMP and improvement opportunities. ➤ Development of environmental/compliance work programs.

Title	Name and Contact Details	Responsibility
All employees and Contractors	N/A	<ul style="list-style-type: none"> ➤ Complete a site induction and other required training before commencing work on site. ➤ Ensuring their areas of control, works and associated personnel comply with the requirements of this OEMP and related documents. ➤ Respond to any environmental incidents immediately; reporting any incidents, non-conformance or corrective actions. ➤ Participate in environmental audits and implement any corrective actions.

6. Environmental Management

The management and mitigation measures (MMMs) for the Site have been developed based on the requirements outlined in PA 05_0037, modifications and associated management and mitigation measures outlined in the relevant Environmental Assessments. These MMMs have been further developed based on experience of the site personnel and associated WHSE support functions.

The following environmental aspects are managed on site:

- Soil and water
- Noise
- Waste
- Vegetation
- Energy use

Management of the following environmental aspects are outlined in the associated sub-plans to this OEMP:

- Air quality and odour
- Groundwater
- Traffic

As indicated in Section 1.3 above, though not a specific requirement of the Planning Approval Cleanaway also maintains a separate Stormwater Management Plan for the Refinery site.

6.1 Soil and Water

The site can be divided into three stormwater catchment systems, these include:

- Bunded areas which are treated by the site water treatment plant and discharged to trade waste via a Hunter Water Trade Waste agreement, except in the instance of flooding events / extreme weather events.
- Paved areas around the refinery operations on the west of the site which discharge to off-site stormwater.
- Undeveloped areas (mostly grassed) in the east and south of the site which are not actively managed.

Stormwater from the site is management in accordance with the following procedures:

- Stormwater Management Plan
- Cleanaway Rutherford Puraceptor Operation SOP (0058-PO-SOP)

Bunded Areas

Stormwater collected in the bunded areas of the HGP, FPCC, TOH and Process tank farm is directed to the HGP sump where it is collected and treated. Stormwater that is collected in the storage tank farm is also pumped into the HGP sump. Oil in the HGP sump is skimmed off into the Puraceptor and water is tested and pumped to trade waste.

The blowdown water from the boilers is collected in a pit near the boiler house and is pumped to the trade waste pit.

During extended periods of rain, water from the pits will be sent to trade waste via the Puraceptor, provided the waste meets the conditions set out in the Trade Waste Agreement with Hunter Water. If due to storm conditions, the volume of water treated by the Puraceptor exceeds the routine discharge rate of the trade waste agreement,

either a temporary increase to the trade waste discharge will be sought from Hunter Water or the stormwater will be tested then discharged via the onsite Vortsentry (if appropriate).

The oil-water separator is operated in accordance with the *Cleanaway Rutherford Puraceptor Operation SOP* (0058-PO-SOP). The Puraceptor vessel should get cleaned out 6 monthly as a minimum. The Puraceptor will be serviced by an accredited maintenance contractor in conjunction with a waste contractor licensed to transport wastewater at intervals not exceeding 12 months. Oils from the Puraceptor are collected and disposed to a licensed liquid waste disposal facility (where unable to be processed onsite).

A granulated activated carbon filter is in use to treat condensate exposed to hydrocarbon vapours prior to Trade waste discharge. Granulated activated carbon filter is to have the activated carbon replaced upon petroleum hydrocarbon sample results reaching 20 mg/L.

Discharges to trade waste are undertaken in accordance with Trade Waste Agreement Consent No.2006-978/27. The latest copy of this agreement is maintained on the Cleanaway Portal.

The following controls are in place to reduce potential environmental impacts to soil and water:

- Tanks are fitted with automatic tank gauging, high levels alarms including automated high level shut off system, preventative maintenance is conducted on the alarm system, daily inventory reconciliation, and are located within bunds.
- All process, transfer and storage activities will be conducted on impervious surfaces within a bunded areas.
- Spills will be immediately cleaned up and spill management kits will be available throughout the site (for example wheelie bin style spill kits).
- Bunds are inspected at least twice per day (during each day and night shift) for contamination.
- Pipelines will be inspected weekly and detected leaks rectified and any maintenance required to be undertaken promptly.
- The MOD 5³ tank bund will be designed to include:
 - a) Include a bund lining system to achieve an impermeable barrier;
 - b) be designed, constructed and maintained in accordance with AS 1940:2004 and the EPA Technical Guideline Bunding and Spill Management;
 - c) Include the installation of an early warning leak detection and prevention systems, prior to commencement of operations, that are certified by a site auditor accredited under the Contaminated Land Management Act, 1997;
 - d) Include measures to manage liquids within the bund to ensure no migration of contaminants occurs that could cause pollution of land and/or groundwater;
 - e) contained materials within the bund are compatible with bund construction such that its long-term function is not impaired; and
 - f) be included in the Site's monitoring programs to ensure the bund achieves its performance objectives and continues to provide an effective barrier for the prevention of pollution of land and waters.
- All chemicals, fuels and oils will be stored in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. The bund(s) shall be designed and installed in accordance with:
 - a) The requirements of all relevant Australian Standards; and
 - b) The EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.

³ At the time of developing this OEMP, MOD5 has not been constructed onsite.

In the event of an inconsistency between the requirements listed from a) to b) above, the most stringent requirement shall prevail to the extent of the inconsistency.

Refinery hardstand areas

Stormwater collected from the refinery roadways and hardstand areas (noting the treatment of water in bunded areas is referred to above) are collected in the Site's stormwater system via grated drains and directed to an oil/water separator (Hydrodynamic Vortex Separator) designed to remove solids / sediment, pollutants, oil and other floatables in the water. The stormwater discharge valve (shut-off valve) is maintained closed to restrict discharge to the off-site stormwater drain. The stormwater valve must be kept closed at all times unless release is permitted under controlled conditions as set out in the Stormwater Management Plan - for instance during large rainfall events.

The key water quality management strategy adopted by the Site has been to prevent, to the extent possible, contamination of stormwater by waste oils. Consequently, the stormwater system only collects runoff from areas of the refinery which are considered low risk, such as roadways and building roofs.

Stormwater is managed under the refinery Stormwater Management Plan. The Stormwater Management plan includes:

- An overview of the stormwater system (including gratings, interceptor pits, underground pipes)
- Stormwater controls (including valves, pit inspections, maintenance)
- Measures to be undertaken during a rain fall event
- Training
- Monitoring
- Site plan (for the refinery area) of the stormwater systems

Except as may be expressly provided in the EPL for the project, the Site shall comply with section 120 of the *Protection of the Environment Operations Act 1997*.

Inspection of the stormwater infrastructure includes:

- Stormwater grates will be inspected daily (H2P logsheet).
- Stormwater pits are inspected every shift. Levels are to be checked after heavy rainfall (refer to Stormwater Pit Inspection Log).
- Stormwater pits are cleaned out every six months (refer to CWR Inspection and Test Checklist and the Stormwater Pit Inspection Log).
- Hydrodynamic Vortex Separator is inspected and cleaned every 6 months.

6.2 Noise

Noise is generated from the operation of the refinery plant, truck movements and on-site machinery (i.e. forklift). In accordance with EPL, Condition L5.1 noise generated at the premises must not exceed the following levels at the noise receptors (A to P) shown in **Figure 2**:

- a) 37dB(A) $L_{Aeq(15\text{ minute})}$ at (Receptor B);
- b) 35 dB(A) $L_{Aeq(15\text{ minute})}$ at (Receptors A to P excluding B); and
- c) 49 dB(A) $LA1(1\text{ minute})$ at Receptors A to P during the hours 10pm to 7am Monday to Saturday and 10pm to 8am Sunday

at all times, except as expressly provided by the EPL.

Where L_{Aeq} means the equivalent continuous noise level – the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

An *Operational Air and Noise Validation Report* was prepared by ENSR, dated 10 December 2008 to inform the management of operation noise from the Site. The Report found that:

- *Given the significant acoustic influences noted around the Rutherford area, it is recommended that the noise measurements be undertaken again without the influence of TPR i.e. during a scheduled shutdown period when no schedule maintenance could influence the results. The aim of this is to establish the contribution of the TPR plant to the background noise.*
- *Should the results of the measurements prove to be inconclusive, it is recommended that noise levels at major plant activities be measured and converted to sound power levels and added to a noise model to allow predictions of actual noise. This would allow verifiable predictions to be made at the property boundary and beyond.*
- *In the event that the two activities outlined above do not result in demonstration of compliance, TPR would investigate other methods to reduce noise emissions from their facility.*

Based on these findings Cleanaway will undertake further noise monitoring to further define the management measures for noise from the site (refer to Section 7)⁴.

The following controls will be implemented to reduce potential noise impacts:

- Vehicles will access the site via Kyle Street. No queuing of road transport trucks on Kyle Street should take place at any time.
- Use of horns or engine brakes will be restricted.
- Trucks movements will be limited to no more than six movements per hour (excluding peak flows).
- Trucks entering the site during night time periods are to have air brake suspension.
- The on-site speed limit is 10 km/hr.
- Cleanaway fleet vehicles and equipment will be maintained.
- Plant and equipment will be operated to avoid 'revving', 'idling' or 'warming up' within the proximity of residential receivers.
- Residential class mufflers and where applicable, engine shrouds (acoustic lining) will be fitted to mitigate noise from on-site mobile engine sources.
- Plant and equipment will be selected based on minimal noise emissions as documented in the Management of Change Checklist.
- Any excessively loud activities should be scheduled during periods of the day when an increase in general ambient noise levels is apparent.

Additional information is contained in the site Traffic Management Plan and the Transport Code of Conduct (TCC) document for the site.

6.3 Vegetation

During the original design of the project four remnants of the Hunter Lowland Redgum Forest and Lower Hunter Spotted Gum-Ironbark forest communities were identified on the site. Cleanaway must retain the vegetation community referred to as 'Remnant 4' and partially retain 'Remnant 3', refer to **Figure 3**, throughout the life of the project, ensuring it is in a healthy and tidy state. A Vegetation Management Plan (VMP) was prepared under the Construction Environmental Management Plan (CEMP) to address the requirements of PA 05_0037, Condition 3.4(c) to plan. The VMP identified that the landscaping listed in **Table 6** was undertaken to off-set the loss of vegetation during construction and to enhance screening.

⁴ Last noise monitoring / validation report conducted in 2020.

Table 6: Landscaping details

Planting area	Planting	Reason	Location
P1	Approximately 25 Eucalyptus Maculata and 25 E. Fibrosa	Offsetting those lost from endangered ecological community (EEC), Remnant Area 2	Along 40 m of the boundary in a zigzag formation
P2	Six She Oaks will be added to the existing Casuarinas	These will be placed in the gaps where it appears previous trees have been lost prior to the development	Along the eastern side of the eastern building
P3	Mixture of Melaleuca Revolution and Callistemon Saligus planted 4 m apart	Screening	Along the driveway, extending to the rear of the site
P4	Two Eucalyptus Paniculata and 2 E. Fibrosa	To enhance the existing screen	Eastern boundary of the site

The relevant operational management measures including delineation controls and revegetation works from the VMP include:

- The site induction will include awareness of the remnant vegetation and landscaped vegetation.
- The Remnant 4 area will be fenced to restrict access.
- Landscaped vegetation will be watered as required. Should any plantings listed in **Table 6** die they will be replaced.
- The health of the trees will be monitored during the monthly site inspection for the Site.
- Weeds will be monitored monthly. Prior to spraying all personnel on site will be informed and a record will be kept on the shift log.

6.4 Energy Use Plan and Lighting

The following measures will be implemented at the Site to conserve energy, minimise power and water requirements:

- Wherever possible, low energy consumption equipment will be installed and will include variable speed electric motors and PLC isolation steps to best manage the use of power.
- Energy efficient pumps, motors, lighting and other equipment will be installed where possible.
- Smart and high efficiency lighting systems will be employed in all cases and will have photosensors fitted, where possible, to best manage the life of the equipment and minimise the use of power.
- Steam pipelines from the boiler will be insulated to retain heat.
- Where possible steam condensate lines will be reused as boiler feedwater to reduce boiler raw water consumption.
- The boiler will be fired by recycled oil and/or natural gas.
- Non-standard fuels will not be used as fuel at the site.
- External lighting associated with the Site will not create a nuisance to surrounding properties or roadways and will comply with AS 4282(INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.

6.5 Waste and Resource Management

The waste management strategy for wastes generated at the site is outlined in **Table 7**.

- Wastes will only be stored in appropriately designated areas.
- All waste generated on site will be classified in accordance with the NSW EPA's Waste Classification Guidelines and disposed of to an appropriately licensed facility for processing or disposal.
- Chemical and industrial wastes will be separated and clearly identified to ensure appropriate waste disposal methods.
- Waste will only be transported by appropriately licensed transporters.
- The only waste/s to be received, stored, treated and/or (re)processed on site are waste lubricant oils, as recorded in the Daily Tank Stock records.
- A Liquid and Solid Waste Storage Plan (LSWSP) will be maintained for the Site and records of waste generated, storage and processing / disposal will be managed via the site weighbridge system.
- A waste audit will be undertaken annually of the weighbridge records to review the types and volumes of wastes generated, opportunities for waste avoidance, re-use, and recycling, waste storage and segregation methods, waste treatment and disposal techniques and destination of waste materials.

Table 7: Waste Management Strategy

Activity	Waste type	Waste Classification	Management Strategy			
			On-site storage / treatment	On-site reuse / recycle	Transport requirements (e.g. tracking)	Planned off-site disposal / recycling facility
Office / Administration areas	General waste (e.g. food waste, contaminated food packaging, non-recyclable plastics) from workers	General solid waste (putrescible)	General waste will be collected on-site in designated waste collection bins. No recyclable or contaminated materials are to be placed in these bins.	Nil	Nil	Landfill
Office / Administration areas	Co-mingled recyclables (e.g. paper, cans, glass and plastic bottles, cardboard) from workers	General solid waste (non-putrescible)	Paper, cardboard, glass and plastic waste will be collected on-site in designated recycling collection bins. No general waste (putrescible) or contaminated materials are to be placed in these bins.	Nil	Nil	Recycling/Waste to Fuels
Refinery	Metals	General solid waste (non-putrescible)	Metal Recycling Bin at Maintenance Shed.	Nil	Nil	Metals recycling
Refinery	Spent Catalyst (D210)	Hazardous waste	Storage in the Process Store for transport offsite.	Nil	Transported in accordance with ADG Code and IMO shipping requirements as D210	Sent to interstate processing facility for treatment before forwarding to reclamation facility.
Refinery	Spent Activated Carbon	General solid waste (non-putrescible)	Storage in DG Shed.	Nil	Nil	Waste to Fuels/landfill.
Refinery	Waste water	Trade Waste	Process waters are treated prior to disposal as trade waste water agreement with Hunter Water.	Process	Nil	Hunter Waster Trade Waste Agreement (No.2006-978/27)
Site gardens / vegetation	Garden Waste (site compound vegetation removal)	General solid waste (putrescible)	Mulched on-site by landscape contractor (shredded green waste from pruning used as mulch).	Mulch	Nil	Nil

Activity	Waste type	Waste Classification	Management Strategy			
			On-site storage / treatment	On-site reuse / recycle	Transport requirements (e.g. tracking)	Planned off-site disposal / recycling facility
Historical Asbestos Waste	Asbestos	Special Waste – Asbestos	Isolated and managed in alignment with WHSE regulation/s until offsite disposal can occur.	Nil	In alignment with NSW EPA requirements.	Landfill

7. Inspections and Monitoring

7.1 Environmental Inspections

The maintenance program will include daily, weekly and monthly inspection checklists to ensure proper and functional operation of plant and equipment. The following environmental inspections and records will be undertaken and maintained by the Site.

Table 8: Environmental inspections and records for reporting

Checklist	Environmental controls / checks	Frequency	Responsibility
Flare Log	<ul style="list-style-type: none"> Date and duration (time start and finish) of flaring; The reason for flaring (e.g. plant start-up, plant shutdown, emergency event, equipment fault or maintenance, etc); Appearance of the plume from the flare stack (e.g. if a visible plume is seen). 	Whenever the flare operates (PIC 1026 becomes 'active')	Engineer (or relevant delegate)
Daily Tank Stock Records	Record waste received, stored, treated and/or (re)processed on site	Daily	
Weighbridge System	Record waste type, volume, classification and management and disposal	Managed via the weighbridge system	
H2P Log Sheet	Check operation of refinery plant and equipment	Daily	
HGP Outside Log Sheet	Check operation of refinery plant and equipment	Daily	
Workplace Inspection Form	Environmental compliance including stormwater controls, weeds, litter, waste management, waste tracking, storage of chemicals	Monthly	
Stormwater Pit Inspection Log	Check of water levels	Monthly	
CWR Inspection and Test Checklist	Stormwater system	6-monthly	
Containment Bund, Tank and Pipeline Integrity Assessment Program	<p>Prior to commencement of operations of MOD 5, the Applicant shall implement a Containment Bund, Tank and Pipeline Integrity Assessment Program.</p> <p>The program must detail measures to assess and maintain</p>	Annually	

Checklist	Environmental controls / checks	Frequency	Responsibility
	the integrity of the tank farm containment bund, other containment structures, tanks and pipelines during the life of the facility.		
MOPP Inspection Form	Refer to AQMP for more information.	Refer to AQMP for more information.	ReOil Qualified Personnel

7.2 Monitoring and Reporting

Records of all environmental monitoring undertaken for the Site will include:

- The date(s) on which a sample was taken;
- The time(s) at which a sample was taken;
- The point at which the sample was taken; and
- The name of the person who collected the sample.

All records must be kept in a legible form for at least four years.

Table 9 includes the environmental monitoring undertaken at the Site. **Table 10** includes the environmental reporting completed by the Site.

Table 9: Environmental monitoring

Requirement	Aspect	Monitoring	Frequency / timing
MMM 27a	Water	<p>To manage surface water contamination from operations. The Site will monitor stormwater on a quarterly basis and take a sample prior to discharge off-site.</p> <p>Stormwater discharged from the Site will be managed on an ongoing basis with the aim being for all parameters to be below the following limits:</p> <ul style="list-style-type: none"> • Total Phosphorus - 500 ug/L • Total Ammonia – 900 ug/L* • Salinity / Electrical Conductivity - 125–2200 µScm1^ • Total Oil & Grease – 5mg/L • Suspended Solids – 50mg/L^ • pH – 6.5-8.0^ • TRH / TPH – no limit set <p>Inspections for odour, sheen and/or visual product will also occur prior to every offsite release.</p> <p><small>*Based on ANZG 95% Protection Limit</small></p> <p><small>* Based on ANZECC Guideline for Lowland Rivers in SE Australia</small></p>	Quarterly during discharge off-site from the stormwater system (rainfall dependent)
PA 05_0037 Condition 4.2	Noise	Additional noise monitoring as described in the Operational Air and Odour Validation Report (ENSR,	2020

Requirement	Aspect	Monitoring	Frequency / timing
		2010) to inform noise management measures for the Site will be undertaken in 2019/20 (since completed).	
-	Noise	Noise monitoring will be undertaken in the following circumstances: <ul style="list-style-type: none"> a verified noise complaint is received; or to monitor equipment performance and impacts on health and the environment Noise monitoring will be conducted by a qualified person in accordance with the DEC's NSW Industrial Noise Policy (2000).	As required
PA 05_0037 and EPL 12555	Air quality	Refer to the AQMP for detail on Air Quality monitoring undertaken on site. Works completed by experienced and competent 3 rd party consultants.	Yearly
PA 05_0037 and EPL 12555	Groundwater	Refer to the GWMP for detail on Air Quality monitoring undertaken on site. Works completed by experienced and competent 3 rd party consultants.	Yearly

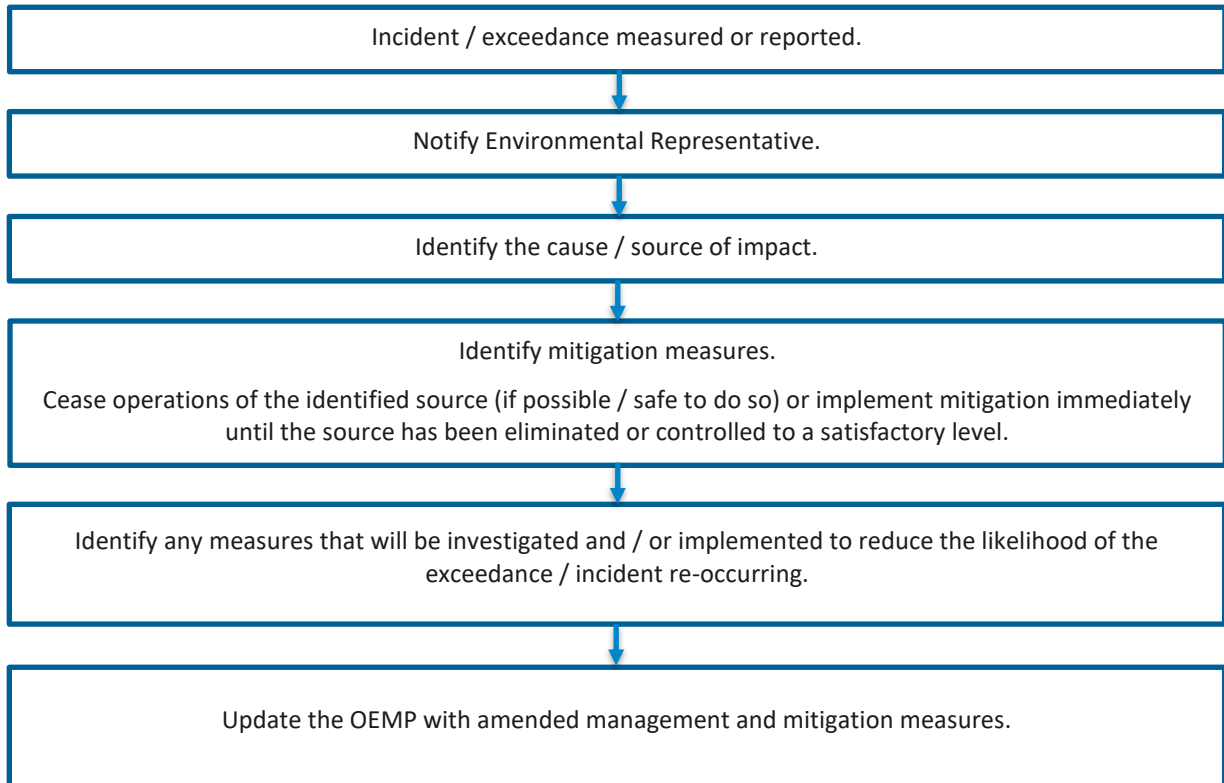
Table 10: Environmental reporting

Requirement	Aspect	Reporting	Frequency / date
PA 05_0037 Condition 4.2	Noise	An Operational Air and Noise Validation Report will be prepared within three months of commissioning operations	Completed – dated 10.12.08
PA 05_0037 Condition 2.18	Bunds	Cleanaway shall submit to the satisfaction of the Secretary, a report confirming the bunds have been installed in accordance with condition 2.18B. The report shall include: <ol style="list-style-type: none"> As-constructed drawings from field surveys depicting the base elevation of the bund, upper surface of the liner(s), geotextiles, engineered liners and sealed layers of the bund; Construction quality control results; and Written advice from the person(s) overseeing the works that the bunds were installed in accordance with the approved design and construction specifications. 	Prior to commencement of operations of MOD 5
EPL M8.1	Other	Detailed records of each flare use must be kept on site and made available to the EPA on request. Each record must include the flare start and stop time and the reason for its use.	Ongoing
EPL M8.2	Other	Detailed records of all process upsets and process start-ups and shutdowns must be kept. Each record must include the process start and stop time and the reason for each process upset.	Ongoing
EPL R4.1	Other	The EPA must be notified of any process start-up, process shut-down and/or process upset which results in the concentration of hydrogen sulphide, as measured by the continuous hydrogen sulphide monitoring system	As required

Requirement	Aspect	Reporting	Frequency / date
		exceeding 15 parts per million for a period of 30 secs or more. The notification must be made within 24 hours.	
EPL R1	Annual Reporting	An Annual Return, for EPL 12555 must be submitted to the EPA at the end of each reporting period. The Annual Return must be submitted not later than 60 days after the end of the reporting period.	Annually
PA 05_0037 Condition 5.2	Other	<p>The AEMR will include:</p> <ul style="list-style-type: none"> d) Details of compliance with the condition of PA 05_0037, and any other licences and approvals for the Site; e) A list of variations obtained to approvals applicable to the development and to the site during the preceding twelve-month period; f) A copy of the Complaints Register for the preceding twelve month period (exclusive of personal details), and a description of how these complaints were addressed and resolved; g) Results of all environmental monitoring required under PA 05_0037 and other approvals, including interpretations and discussion by a suitably qualified person; h) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident; i) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in the EA and the additional information listed under PA 05_0037, Condition 1.1; j) Identification of trends in monitoring data over the life of the development to date; and k) Environmental management targets and strategies for the following twelve-month period, taking into account identified trends in monitoring results. 	Submitted to the DPE annually on the 22 December

8. Corrective Action

In the event that a monitoring event reports an exceedance, or a verified environmental complaint and/or incident occurs the following procedure will be implemented to identify corrective actions:



Note, where notifications are required to DPE, Council or the NSW EPA these should also occur in alignment with NSW legislation and regulations. Consult with the Cleanaway Environment Team to determine if a notification to the relevant regulators is required.

9. Auditing

9.1 Environmental Audits

Environmental audits provide a measurement of performance and an analysis of potential issues associated with:

- regulatory compliance;
- identification of potential risks and liabilities;
- operational efficiency in relation to environmental practice.

The following environmental audits are undertaken for the Site:

Table 11: Environmental audits

Requirement	Audit	Frequency	Status
PA 05_0037 Condition 4.4	Independent Environmental Audit (IEA).	Within one year of commencement*	Completed
PA 05_0037 Condition 4.6	Independent Environmental Audit (IEA).	3 Yearly, or as directed by the Secretary (DPE)*	Ongoing
PA 05_0037 Condition 5.2	Annual Environmental Management Report (AEMR).	Annually	Ongoing
Cleanaway EMS	Internal audit against the Cleanaway EMS and OEMP to review the level of environmental performance, ensure compliance with legislation and regulatory standards, and review the effectiveness of environmental management procedures. Conducted by BSI Global.	Annually	Ongoing
EPL No.12555	Annual return preparation and submission to NSW EPA. To include a review and assessment of compliance against the EPL conditions utilising the Cleanaway Compliance Tool.	Annually	Ongoing
Second Line of Defence Environment al Audits	Internal environmental audit program of randomly selected sites across the Cleanaway to ensure compliance with EPL conditions and the Environmental Absolutes.	Annually, if selected as an audit site (otherwise once every 3-4 years, as a minimum)	Ongoing

*Within two months of commissioning and Independent Environmental Audit a copy of the Audit including a response plan to recommendations made within the audit will be submitted to the DPE.

10. Communication and Reporting

10.1 Community Complaints

Cleanaway maintains the following methods for receiving community complaints:

- (i) a 24-hour telephone number (1800 158 447)
- (ii) a postal address – ‘PO Box 246, Rutherford NSW 2320’
- (iii) Cleanaway Facebook Page: www.facebook.com/CleanawayAU
- (iv) General Enquiry Form – via Cleanaway Corporate website

It is noted that PA 05_0037 requires an email address to be advertised. Cleanaway maintains the Facebook page as a means of meeting the requires of an email address complaint method.

The phone details are displayed on a sign near the entrance to the site, in a position that is clearly visible to the public and on Cleanaway’s internet site.

The telephone number, post address and email address (or Facebook page) will be maintained throughout the life of the development.

Complaints are recorded in a Cleanaway ‘*Incident Non-Conformance Report*’ and transferred to the MyOSH incident recording system. The following information is recorded:

- a) The date and time of the complaint;
- b) The method by which the complaint was made (telephone, mail or email);
- c) Any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
- d) The nature of the complaint;
- e) The action(s) taken by Cleanaway in relation to the complaint, including any follow-up contact with the complainant; and
- f) If no action was taken in relation to the complaint, the reason(s) why no action was taken.

Records of a complaints must be kept for at least 4 years after the complaint was made. The complaints recorded in the MyOSH will be made available for inspection by the DPE and EPA upon request.

10.2 Incident Notification and Reporting

Management of incidents is outlined in the Site’s ERP and PIRMP. Environmental incidents are managed in the MyOSH incident management system.

The following information is recorded for environmental incidents:

- incident date
- time
- type (incident, injury, near miss)
- category (e.g. contamination, airborne release, spill, water discharge and odour)
- findings of investigation
- corrective actions
- incident status
- incident reportable (Y/N)
- external authority notified (Y/N)

Response to environmental incidents of environmental harm are addressed in the PIRMP.

10.3 Public Availability

Subject to confidentiality, Cleanaway will make the following documents, required under PA 05_0037 publicly available.

- Condition 2.17 – Soil Contamination Validation Report prior to construction
- Condition 2.18 – Groundwater Contamination Assessment
- Condition 2.21A – Construction Safety Study
- Condition 3.5 – OEMP, including an AQMP, GWMP and Transport Code of Conduct
- Condition 4.2 – Operational Air and Noise Validation Report
- Condition 4.4 – Independent Environment Audits
- Condition 5.2 – Annual Environmental Management Reports

Following commencement of construction of MOD 5⁵ works the following plans will be made available publicly:

- Condition 2.21B - Fire Safety Study, Final Hazard Analysis, Construction Safety Study
- Condition 2.22A - Emergency Plan
- Condition 3.4A – CEMP
- Condition 4.3A - an updated Operational Air and Odour Validation Report

Following commencement of construction of MOD 7 works the following plans will be made available publicly:

- Condition 4.3A - an updated Operational Air and Odour Validation Report

10.4 Emergency Response

A comprehensive ERP (known as a Site Emergency Management Plan) is currently implemented at the Site, with associated response and safety equipment (i.e. spill kits, firefighting equipment and first aid kits) held on Site. The refinery is fully fenced and has 24hr security to prevent unauthorised access to work areas.

Regular training exercises are carried out by Cleanaway as detailed in the ERP.

⁵ At the time of developing this OEMP, MOD5 has not be constructed onsite.

11. Training and Awareness

Cleanaway has a site induction program that all contractors and employees are required to complete prior to undertaking any work. The site induction includes the requirement for mandatory compliance with this OEMP, associated sub-plans and emergency procedures for the Site.

Relevant Cleanaway personnel will have the experience and necessary training to carry out the tasks required for the implementation of this OEMP. This will include awareness of current Cleanaway environmental measures, including the appropriate use and maintenance of equipment as well as first aid and firefighting measures.

Specific environmental training will be provided as relevant by Cleanaway, or delegated to relevant Contractors, including:

- Relevant existing environmental management measures
- Stormwater control and management
- Noise management, including road traffic noise
- Complaints and incident reporting
- Vegetation management
- Waste management
- Spill kit use and management
- Emergency response

Cleanaway will maintain a Training Register (I.e. MyOSH) that records all environmental training completed by its personnel, including records of attendance at awareness training and toolbox talks, as well as competency assessments.

12. Review and Revision Process

The OEMP will be reviewed by site personnel and the Environmental Business Partner (or their delegate) once a year or when the following occur:

- The operations at the Site significantly change, for example following a modification to PA 05_0037 or a significant variation to the EPL;
- Opportunities for improvement, or deficiencies in the existing system are identified through Audit Reports, Incident / Non-conformance Reports, and / or-site observations; or
- Within three months of an independent environment audit, in consultation with the EPA and Council, to the satisfaction of the DPE.

13. Attachment A – Environmental Policy



1. Application

This policy applies to all employees, contractors and joint ventures engaged in activities under the operational control of Cleanaway Waste Management Ltd and its subsidiaries (Cleanaway).

2. Policy objectives

Our mission is to make a sustainable future possible together. We see all waste as a resource and use our facilities and processes to transform it into valuable commodities.

Our vision for Health, Safety and Environment is industry-leading HSE performance.

We are committed to achieving our mission, and to continually improve our environmental standards for the benefit of the environment, our employees, stakeholders and the community.

At Cleanaway Environment, together with Health & Safety, is a foundation, not a priority. We believe that upholding the highest standards in environmental performance is crucial to the success and sustainability of our business.

Operating principles

Cleanaway achieves these objectives by:

- Complying with all legal requirements and standards applicable to our activities; and where adequate regulation does not exist, adopting practices that reflect our commitment to environmental compliance.
- Identifying opportunities for the prevention and reduction of pollution to air, water and soil, in accordance with our Environment Absolutes, including climate-modifying emissions, and implementing energy efficiency programs throughout the business.
- Developing ways to reduce, recover, recycle, or re-use waste in all aspects of our business, including considering and integrating environmental factors in our decision-making process.
- Providing resources to implement and maintain an effective system of environmental management.
- Identifying and understanding the environmental hazards inherent to the activities we undertake and effectively assessing, controlling and managing those risks.
- Setting objectives, targets and key performance indicators which continually drive us to improve our environmental performance.
- Providing employees with training, coaching and information necessary for them to understand what the impacts of their activities are; and to enable them to work in an environmentally responsible and competent manner.
- Liaising, consulting and building relationships with our employees, regulators, local community and other key stakeholders to develop mutual respect for one another and the environment.
- Ensuring that incidents are investigated, specifically identifying the causal and contributing factors, so that remedial actions may be taken and learnings may be shared to improve our environmental performance.
- Regularly undertaking audits and inspections of our operations.
- Communicating this policy to employees and interested stakeholders; and reporting on our environmental performance openly and transparently.

3. Responsibilities

All employees and contractors are required to:

- Carry out their work in accordance with Cleanaway's Environment Policy, Environment Absolutes, Standards and Procedures.
- Assess and manage the environmental hazards and risks associated with the activities they are undertaking.
- Report any incident which generates any actual or potential harm to the environment.



Reviewed and approved by the Board of Directors on 20 June 2023

Version control table

Document description	Environment Policy
Document owner	Head of Environment and Regulatory Compliance
Document approved by	Cleanaway Board of Directors
Version number	8
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Approval date	20 June 2023
Next review date	February 2024

14. Attachment B – Liquid and Solid Waste Storage Plan (LSWSP)

15. Attachment C – Air Quality Management Plan

16. Attachment D – Transport Code of Conduct

17. Attachment E – Groundwater Management Plan

18. Attachment F – Environmental Risk Register

19. Attachment G – Stormwater Management Plan

End of Document
