CLEANAWAY
Making a sustainable future possible

Operational Environmental Management Plan (OEMP)

Erskine Park Resource Management Facility
Stage 1 – Waste Transfer Station

Date: August 2023
Prepared by: SLR Consulting Australia Pty Ltd
Updated by: Cleanaway Pty Ltd
Version: Rev 2

Document Control

Reference	Date	Prepared	Checked	Authorised
FINAL	10 September 2018	Tracey Ball (SLR)	Chris Jones (SLR)	Susan Stupkin
REV 1	22 October 2018	Tracey Ball (SLR)	Chris Jones (SLR)	Susan Stupkin
REV 2	24 August 2023	Haydn Rossback (CWY)	Giovanni Ruscio (CWY)	Ash Turner (CWY)

Contents

APPENDICES[1]

[1] Appendices are managed separately to the Erskine Park OEMP, but referred to in this document.

1. INTRODUCTION

1.1 Background

The Independent Planning Commission of NSW (IPCN) (formerly Planning Assessment Commission [PAC]), acting as delegate for the Minister for Planning, approved an application for the Erskine Park Waste and Resource Management Facility (WRMF) Staged Development Application (SSD 7075) on the 4 October 2016, comprising:

- A concept proposal for a Waste and Resource Management Facility with a maximum processing capacity of 300,000 tpa. All waste received at the WRMF shall enter the Waste Transfer Station (Stage 1), up to 150,000 tpa of this waste may be recycled at the Resource Recovery Facility (Stage 2); and
- Construction and operation of the Stage 1 Waste Transfer Station with a maximum processing capacity of 300,000 tpa.

The WRMF will be developed in two stages, the first being a Waste Transfer Station (WTS) and the second being a Resource Recovery Facility (RRF). An Environmental Impact Statement (EIS) was prepared to support the application for the WRMF Concept Proposal and the Stage 1 WTS. A separate EIS for the Stage 2 RRF will be developed at a later date.

Five modifications to the Development Consent have been submitted under Section 4.55 (1A) of the Environmental Planning and Assessment Act, 1979 (EP&A Act), and approved by the Department of Planning and Environment (DPE):

- Modification 1 (Mod 1 – approved in August 2017) - made changes to the staging of the development, layout of car parking / truck parking / load outbays, capacity of the stormwater management system, reduction in overall site levels and changes to the ramps accessing the landfill.
- Modification 2 (Mod 2 – approved in Feb 2018) - made minor changes to the site levels, the interface with landfill access ramps and car parking;
- Modification 3 (Mod 3 – approved Oct 2018) - sought approval to install a manual sorting line on the floor of the WTS, to increase the number of carparks onsite, to extend the site hardstand area to the North of the WTS and to provide a driver rest area;
- Modification 4 (Mod 4 – approved Oct 2018) - sought approval to amend the construction hours by modifying Table 3 of Condition B28 Construction and Operation Hours;
- Modification 5 (Mod 5 – approved July 2023) – sought approval to permit the acceptance of 35,000 tpa of glass waste, 3,000 t at any one time and removal of manual sort line.

The WTS will receive commercial waste from the Western Sydney region which will subsequently be transported to a licenced waste management facility off site. A proportion of the waste received at the WTS would be diverted to the RRF for recycling and recovery of saleable products. The design capacity of the completed WRMF is 300,000 tonnes per annum, inclusive of both stages.

While the Site is located in an industrial area, a key consideration in the planning and design of the WTS has been to avoid impacting on the amenity of the surrounding residential community, particularly in relation to odour, noise and traffic issues.

1.2 OEMP Context

This Operational Environmental Management Plan (OEMP) was prepared by SLR Consulting Australia (SLR), on behalf of Cleanaway Pty Ltd (Cleanaway), for the Stage 1 Waste Transfer Station, to satisfy Schedule C (Part C), Condition C3 of Development Consent SSD 7075 (as modified) (refer to **Table 1**).

Cleanaway Pty Ltd have since updated this OEMP in consultation with SLR to ensure the currency of the document. A copy of the original Development Consent SSD 7075, Mod 1, Mod 2, Mod 3, Mod 4 and Mod 5 is referred to in **Appendix A**.

For the purpose of this document, the Development is described in:

- The Environmental Impact Statement (EIS) (SLR 2015a) and the appendices contained within;
- The Response to Submissions (RTS) (SLR 2015b) and the appendices contained within;
- The DA Modification 1 Environmental Assessment (EA) Report (SLR 2017) and the appendices contained within;
- The DA Modification 2 Environmental Assessment (EA) (EME 2018) Report and the appendices contained within;
- The DA Modification 3 Environmental Assessment (EA) (EME 2018) Report and the appendices contained within;
- The DA Modification 4 Environmental Assessment (EA) (EME 2018) Report and the appendices contained within; and
- The DA Modification 5 Environmental Assessment (EA) (EME 2022) Report and the appendices contained within.

Table 1 – OEMP and Management Plans Development Consent Conditions

Condition No.	Conditions	OEMP Section
SCHEDULE C, Part C Operational Environmental Management Plan		
C3	Cleanaway will prepare an Operational Environmental Management Plan for the Development to the satisfaction of the Secretary. This strategy must:	This Plan
a.	be prepared by a suitably qualified and experienced person(s);	Section 1.2 and Appendix B
b.	provide a strategic framework for environmental management of the Development;	Section 3
c.	identify the statutory approvals that apply to the Development;	Section 3
d.	describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Development;	Section 2.2, 4
e.	describe in detail how the environmental performance of the Development would be monitored and managed; and	Sections 4, 5, 6 and 7.
f.	f) describe the procedures that would be implemented to: (i) keep the local community and relevant agencies informed about the operation and environmental performance of the Development; (ii) receive, handle, respond to, and record complaints; (iii) resolve any disputes that may arise; (iv) respond to any non-compliance; and (v) respond to emergencies.	Section 5.3 Section 6 Section 6.6 Sections 5, 7 and 8 Section 7
	Cleanaway will carry out the Development in accordance with the Operational Environmental Management Plan approved by the Secretary (as revised approved by the Secretary from time to time), unless otherwise agreed by the Secretary	Noted
SCHEDULE C, Part C Management Plan Requirements		

C4	The Applicant shall ensure that the environmental management plans/strategies required under this consent are prepared in accordance with any relevant guidelines and include:	Sections 1.2
a.	detailed baseline data;	Refer to Section 4, EIS (SLR, 2015a) and RTS (SLR, 2015b)
b.	a description of:	
	(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Sections 4, 5, 6, 7 and 8
	(ii) any relevant limits or performance measures/criteria;	Section 4
	(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;	Section 4
	(iv) the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	Section 4
c.	a program to monitor and report on the:	
	(i) impacts and environmental performance of the Development;	Sections 4 and 5
	(ii) effectiveness of any management measures;	Section 4 and 5
	(iii) a contingency plan to manage any unpredicted impacts and their consequences;	Section 4.6 and 7
	(iv) a program to investigate and implement ways to improve the environmental performance of the Development over time;	Sections 4, 5 and 7
d.	a protocol for managing and reporting any:	
	(i) incidents;	Section 7
	(ii) complaints;	Section 6
	(iii) non-compliances with statutory requirements;	Sections 4, 5 and 7
	(iv) exceedances of the impact assessment criteria and/or performance criteria; and	Section 4, 5 and 7
	(v) a protocol for periodic review of the plan.	Section 8

In accordance with Development Consent SSD 7075 (as modified), a number of OEMP supporting documents are required to be prepared in consultation with specific approval authorities. A Consultation Register and proof of consultation is included in **Appendix C**. Consultation has been undertaken in accordance with the requirements of Schedule B, Condition A8.

The OEMP has also been prepared in accordance with relevant commitments made in the EIS (SLR, 2015a) Statement of Commitments. Commitments that are relevant to this OEMP are included in **Table 2**.

Table 2 - Relevant Commitments provided in the EIS Statement of Commitments

EIS Section	Aspect/Commitment	OEMP Section
Section 7.11.5	A site-specific Operational Environmental Management Plan (OEMP) will be developed and submitted to DP&E for approval. The OEMP will ensure that the commitments made within the EIS, along with the conditions imposed by the development consent and EPL, are fully implemented and complied with. The OEMP will establish the framework for managing and mitigating the potential environmental impacts of the Development over the life of the operation.	This OEMP

Other operational commitments proposed in the EIS and outlined in the Statement of Commitments have been incorporated in relevant sections of this OEMP. These include mitigation measures, monitoring activities and management strategies.

This OEMP has been prepared in accordance with the *Guideline for the Preparation of Environmental Management Plans* (DPE, 2004).

1.3 OEMP Objectives

The objectives of the OEMP are to:

- Support operations of the Development in accordance with Conditions C3 of Development Consent SSD 7075 (as modified);
- Ensure compliance with all relevant regulatory requirements;
- Minimise the environmental impacts of the Development during operations;
- Engage with the community to minimise complaints;
- Maintain a high level of environmental performance through on-going training and inductions;
- Ensure the commitments made in the approvals documentation are fully implemented and/or complied with during operations; and
- Ensure the environmental risks associated with the operations of the Development are properly managed.

2. Development Description

2.1 Site Description

Development Consent SSD 7075 (as modified) gives permission for the operation of the Stage 1 Waste Transfer Station with a maximum processing capacity of 300,000 tpa. The key aspects of the Development are:

- A steel framed and clad waste transfer station building with associated offices, amenities and lower level transfer vehicle load-out area;
- Fast acting roller shutter doors which will be normally closed;
- Transfer station working floor with concrete peripheral roads;
- An active ventilation system and air treatment system with controlled discharge as part of the overall approach to air emissions and odour management;
- Associated infrastructure including all hardstand areas, car park, weighbridges, and sealed roads; and
- Ancillaries including perimeter security fencing, security gates, rain water harvesting, fire suppression system, signage, landscaping, drainage and services.

The layout of the WTS is shown in **Figure 1**.

The Development site is located approximately 11 kilometres south-east of Penrith in Western Sydney, NSW (see **Figure 2**). It is addressed as 85-87 Quarry Road, Erskine Park NSW, and is identified as Lot 1 in Deposited Plan (DP) 1140063 in the Penrith Local Government Area (LGA). The title comprises approximately 3 hectares. As shown the site is west of and adjacent to the existing Erskine Park Landfill that is located adjacent to the site (Lot 4, DP 1094504).

Sensitive receptors of the Development site are shown on **Figure 3**. The nearest affected residences are located as follows:

- To the west, approximately 850m from the site (RR1);
- To the south, approximately 1.3km from the site (RR2) – this location corresponds to a retirement village;
- To the east, approximately 1.3km from the proposed site (RR3) – this refers to an isolated residence located in the Erskine Business Park; and
- To the north, approximately 850m from the proposed site (RR4).

A child care centre (CC1) is located approximately 670m to the west of the closest boundary of the Development site.

The nearest potentially affected industrial premises are located:

- to the north, approximately 30m to the closest boundary of the site (IR1);
- to the southwest, approximately 50m to the closest boundary (IR2); and
- to the south, approximately 115m to the closest boundary (IR3).

The Development comprises a putrescible / non-putrescible WTS with a nominal volume of approximately 1,040 tonnes of putrescible / non-putrescible waste at any one time (design capacity 300,000 tonnes per annum [tpa]). However, subject to market factors, initially around 90,000 tpa of putrescible waste / non-putrescible will be received at the site and this is expected to increase over time. All received waste is stored onsite temporarily prior to being transported off-site to an appropriately licensed waste management facility.

Waste delivery vehicles will enter the site from the adjoining Quarry Road, weighing on the incoming weighbridge located adjacent to the office. Delivery vehicles then proceed to the eastern side of the building where they align

with one of the roller shutter door entrances on the eastern elevation. The vehicles reverse through one of the rapid acting roller shutter doors, discharge their waste and then drive out of the building, down a ramp and proceed to the south of the transfer station towards the outgoing weighbridge, exiting the site onto Quarry Road. The majority of the material received is waste from commercial waste collection trucks, stationary compactor (packer) hook lift loads, NSW Container Deposit Scheme (CDS) collection trucks and side-loader collections (e.g. 240L mobile garbage bin collections from commercial premises).

Waste offloaded on the tipping floor would be separated into three categories; putrescible, non-putrescible (incl. wood, masonry, rigid plastics, and old corrugated cardboard) and CDS material (i.e. glass bottles). The non-putrescible waste would be sorted for recycling, while the remaining non-putrescible waste would be consolidated with the putrescible waste and transferred into transfer vehicles by a front-end loader which would lift the material over a wall opening for top loading. CDS material will be separate into glass fines and glass cullet, then taken offsite for re-use / recycling (i.e. CSR Insultation and Visy Penrith). Waste will be transferred from site using B-Doubles or single trailers to an appropriately licensed waste management facility in accordance with relevant waste management regulations.

When the RRF is operational, waste deemed suitable (recyclable) would be diverted to the RRF for recycling and recovery of saleable products.

Removed from the Online Version of the document.

Figure 1 - WTS Site Layout

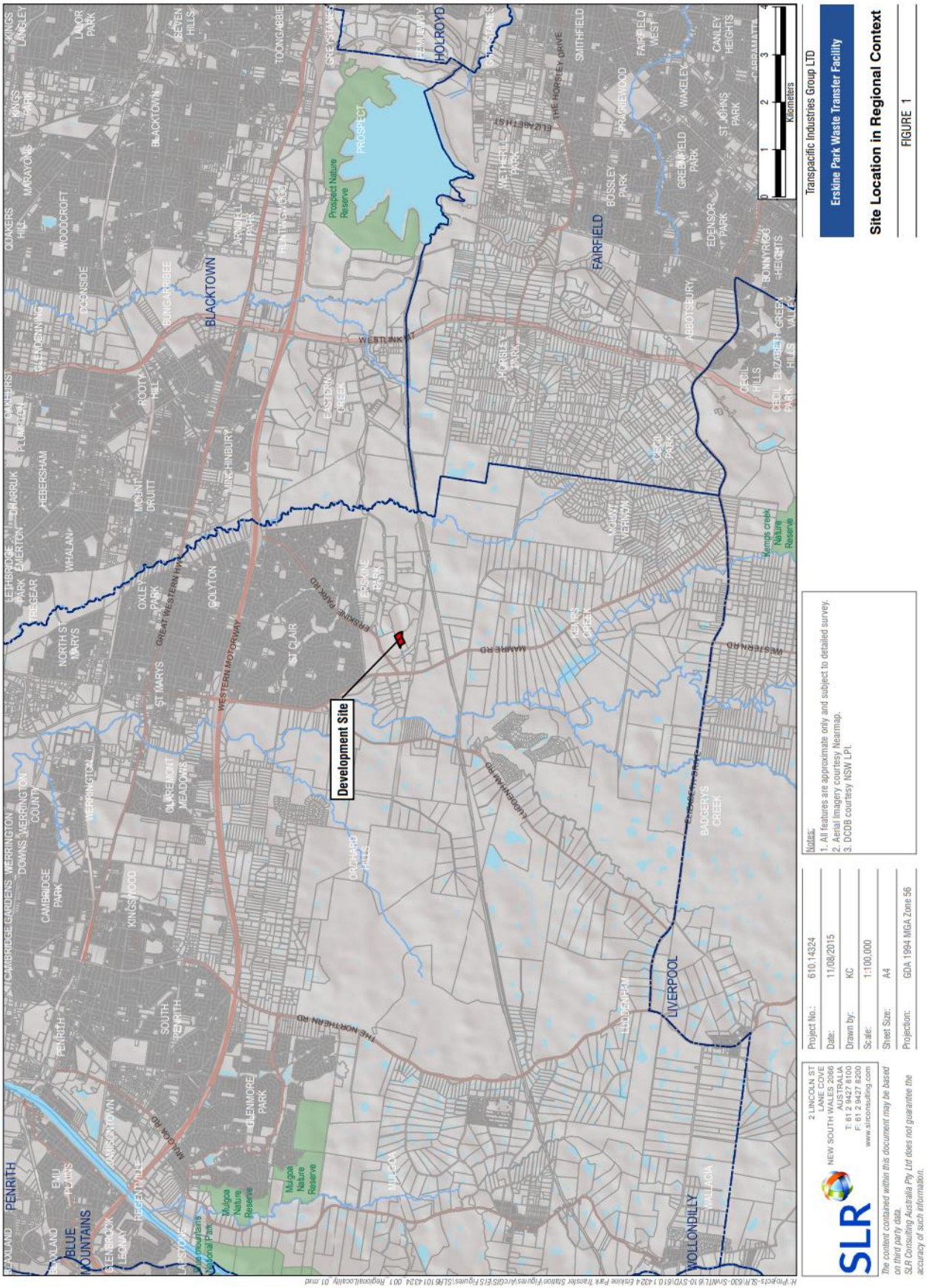

Figure 2 - Site Location in Regional Context

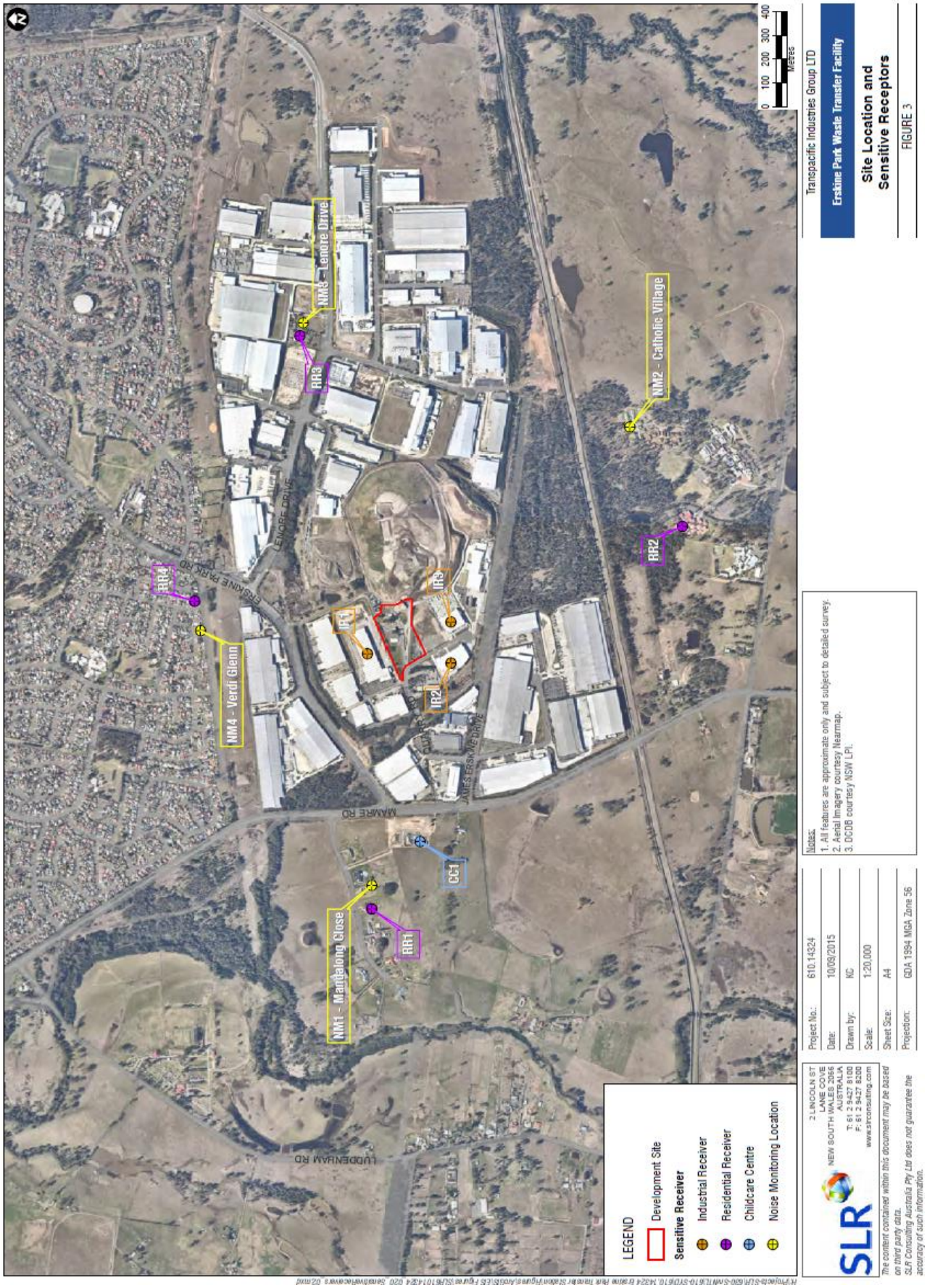

Figure 3 - Sensitive Receptors

Operations Hours
In accordance with Schedule C (Part B), Condition B28 of Development Consent SSD 7075 (as modified), the operations hours for the Development are listed **Table 3**. All operations will occur within the hours listed in **Table 3**.

Table 3 - Operational Hours

Activity	Day	Hours
Operations	Seven days a week	24 hours a day

2.2 Key Contact Details

Table 4 lists the key contacts for the Development.

Table 4 - Contact Details

Location / Personnel	Contact Details
Cleanaway - Erskine Park Site	Removed from the Online Version of the document.
Cleanaway – Environment Manager	Removed from the Online Version of the document.
Cleanaway - Customer Inquiries	Ph: 13 13 39
Cleanaway - Emergency Spills Response	Ph: 1800 774 557 (1800 SPILLS)
Cleanaway - Complaints and Feedback	Ph: 1800 213 753

Table 5 lists the contact details for the regulatory authorities that have an interest in the operations of the Development.

Table 5 - Regulatory Authority Contact List

Regulatory Authority	Contact Details
Department of Planning and Environment (DPE)	
Sydney Office	1300 305 695
NSW Environment Protection Authority (EPA)	
Environment Line	Ph: 131 555 Email: info@epa.nsw.gov.au
Office of Environment and Heritage (OEH)	
Heritage Division	Ph: 131 555 Email: info@environment.nsw.gov.au
Penrith City Council	
Penrith Office	Ph: 02 4732 7777 Email: council@penrith.city
NSW Health	
Penrith Public Health Unit	Ph: 1300 066 055 or 02 4734 2022
Comcare	
Incident Notification Hotline	Ph: 1300 366 979
Fire and Rescue NSW	
St Marys Fire Station	Ph: 02 9623 3897
Emergency Number	Ph: 000
Emergency Services	
NSW Police Fire and Rescue NSW NSW Ambulance Service	Ph: 000

3. Environmental Management Framework

3.1 Development Consent

The Development operates in accordance with Development Consent SSD 7075 (as modified) and also in accordance with the other documents referenced under Condition A1 of the Consent:

- The Staged Development Application (SSD 7075);
- EIS (SLR 2015a);
- The RTS (SLR 2015b);
- The site layout plan and elevations attached to the Development Consent as Appendix 1 and 2, which have been sourced from the EIS (SLR 2015a) and RTS (SLR 2015b); and
- The Management and Mitigation Measures attached to the Development Consent as Appendix 3, which have been replicated from the EIS (SLR 2015a).

If there is any inconsistency between the plans and documentation referred to in Condition A1, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of Development Consent SSD 7075 Mod 5 prevail to the extent of any inconsistency.

3.2 Environment Protection Licence (EPL)

Prior to the construction of the WTS, an Environment Protection Licence (EPL) 20986 was obtained from EPA to allow for construction works to begin. This EPL has been and will be varied (as required) to support the ongoing operation of the WTS. The latest version of the EPL can be access via the NSW EPA Public Register and Cleanaway are committed to complying with the EPL conditions.

3.3 Water Licence – DPI Water

The Development does not hold any water licences.

3.4 Sydney Water Approvals

In accordance with Condition B23 of the Development Consent SSD 7075 (as modified), a Section 73 Compliance Certificate covering water and sewer requirements for the Development was obtained from Sydney Water for the site (see **Appendix D**). Building Plan approval was also obtained from Sydney Water (see **Appendix D**).

A Trade Waste Agreement exists between Cleanaway and Sydney Water for the site (see **Appendix D**), allowing for a maximum discharge volume of 1036kL/day and average daily discharge of 750kL/day average. This is unlikely to change with the operation of the Development.

3.5 Inductions and Training

Cleanaway Site Management will ensure that all employees and contractors involved with the operations of the Development are suitably inducted and trained prior to commencing any work on site. Training in relation to environmental responsibilities and implementation of this OEMP will take place initially through a site induction and then on an on-going basis through “toolbox talks” (or similar).

The topics to be covered during the induction and toolbox talks include:

- General site maintenance and management expectations and requirements;
- Traffic management;
- Familiarisation with site environmental management and mitigation measures in this OEMP;
- The environmental management commitments and responsibilities in this OEMP;
- Waste avoidance and management strategies;
- Appropriate response and management of complaints received from the public, government agencies or other stakeholders in accordance with the protocol detailed in **Section 6**; and
- Appropriate response and management of environmental incidents in accordance with the protocol detailed in **Section 7**.

Records of all inductions and training undertaken will be recorded in the site Training Register/s (or similar systems – i.e. Myosh, electronic sign-in system).

4. Environmental Management Measures

Key environmental issues associated with the Development are identified and addressed in the EIS (SLR 2015a), RTS (SLR 2015b) and modification EAs (SLR 2017; EME Advisory 2018), and a suite of development design, best management practices and mitigation measures have been committed to minimise the potential for adverse impact on the local environment and surrounding community. The environmental mitigation and management measures relevant to the Development are provided in the following sections.

4.1 General

Table 6 outlines the general environmental management and mitigation measures that will be implemented at the Development to minimise the potential for adverse impacts on the local environment and surrounding receptors.

Table 6 - General Management and Mitigation Measures

Mitigation Measures	Responsibility	Timing / Frequency
Cleanaway will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the operation of the Development.	Cleanaway Site Management	On-going
Pests, vermin and declared noxious weeds will be controlled on site by appropriate means, such as spraying.	Cleanaway Site Management	On-going
Fires will be extinguished promptly.	Cleanaway Site Management	On-going
Adequate fire fire-fighting capacity will be maintained on site.	Cleanaway Site Management	On-going
A perimeter fence and security gates have been installed and they will be maintained and locked at all times when the site is unattended.	Cleanaway Site Management	On-going
Employees and contractors will be suitably inducted and trained prior to commencing any work on site.	Cleanaway Site Management	Inductions prior to commencing employment/contract. Regular / as needed toolbox talks.
Contact details will be displayed on signage at the entrance to the site.	Cleanaway Site Management	On-going

Mitigation Measures	Responsibility	Timing / Frequency
Any new signage will be installed in consultation with Penrith City Council (Council) and shall comply with the *State Environmental Planning Policy 64 – Advertising and Signage.*	Cleanaway Site Management	As required (prior to installation of new signage)
All plant and equipment used for the Development will be maintained in a proper and efficient condition and operated in a proper and efficient manner.	Cleanaway Site Management	On-going
Cleanaway (where applicable) will repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Development.	Cleanaway Site Management	On-going

4.2 Air Quality, Odour and Dust

Odour Control

Odour emissions from the WTS can occur during both normal and abnormal conditions. Under normal operations, there are various stages of the process that have potential for odours to arise. These include:

- receipt and unloading of waste inside the WTS;
- temporary storage of waste material within the WTS; and
- handling of waste material within the WTS.

All putrescible waste has the potential to generate odours as the material breaks down over time; as such controls will be in place to prevent or minimise odours.

The assessment of odour from 'normal operations' determined that when operating at the design capacity throughput of 300,000 tonnes per year, the plant would not exceed the NSW EPA impact assessment criterion (called the 'compliance standard') at any residential locations. However, the design objectives were set at a level in excess of that required to satisfy legislation. This is called the 'design standard'. The assessment predicted a minor exceedance of the 'design standard' at residential properties located to the north. In order to not give rise to odour complaints, the assessment identified that additional air pollution control measures would be required when the plant was operating at full capacity, with an operation efficiency of at least 40 percent. An Odour Management System (OMS) (wet scrubber) would achieve the level of abatement required to satisfy this stringent design objective (which was subsequently installed).

A similar assessment was performed for the plant operating in 'emergency operations' i.e. the operations associated with unforeseen events such as road closures or extreme weather events that result in no waste being able to be exported from the WTS. That assessment predicted that additional air pollution control measured would be required with an abatement efficiency of 60 percent or greater. A wet scrubber (OMS) would achieve the level of abatement required to satisfy this stringent design objective (i.e. would achieve both the design standard and the emergency design objective). The risks of this event occurring (road closures and extreme weather events that cause the WTS to be incapable of waste export) are considered to be very low.

An Odour Management Plan (OMP) has been prepared (refer to **Appendix E**), in accordance with SSD 7075 Condition B10 and the conditions of the EPL, that outlines the controls that are to be put in place to prevent such impacts from occurring. This includes the operation of an Odour Management System (OMS), consisting of a wet scrubber and dilution stacks. The OMP also contains an Odour Control System Contingency Plan, to

ensure compliance with EPL Condition L5.1. With the implementation of such controls the 'compliance standard' of 2 OU should be achieved for 99 percent of the year.

An odour audit will be undertaken within 6 months of commencement of the operation of the WTS to validate the Development against the EIS odour predictions. This audit will be undertaken in accordance with the requirements of Development Consent SSD 7075 Condition B12, B13 and B14 and EPL Condition E3.

Odour monitoring will be implemented in accordance with Condition B10 SSD 7075 and the OMP. As outlined in the OMP, the monitoring program will include; ongoing OMS monitoring, daily site inspections, odour surveys, prompt response to any concerns of neighbours, investigations of detected offensive odour and investigations of complaints related to odour.

Dust Control

The Stage 1 Development EIS (SLR 2015) assessed the potential impact of particulate ('dust') from the operation of the WTS. The assessment did not predict any exceedance of the relevant air quality criteria for particulate matter (refer to **Table 7**), nor did it predict the emissions to cause a dust nuisance as expressed through dust deposition rates. Regardless, mitigation measures (refer to **Table 7**) will be implemented to manage dust.

Table 7 - Air Quality Mitigation Measures

Control	Responsibility	Timing / Frequency
Odour Management		
Cleanaway will ensure the Development does not cause or permit the emission of any offensive odour, as defined in the Protection of Environment Operations (POEO) Act.	Cleanaway Site Management	On-going
Reasonable air and odour emission mitigation measures will be implemented to minimise emissions from the Development, including but not limited to an Air Pollution Control System comprising of: (i) A wet scrubber; (ii) Dilution stacks; (iii) Fast acting roller doors; (iv) Water sprays/misters; and (v) Ensure regular maintenance of the air pollution control system.	Cleanaway Site Management	On-going
Cleanaway will ensure that any waste vehicles parked on the Site will not emit offensive odours.	Cleanaway Site Management	On-going
Cleanaway will operate the Development so that air and odour emissions are minimised during all meteorological conditions.	Cleanaway Site Management	On-going
Trucks entering and leaving the premises that are carrying loads will be covered at all times, except during loading and unloading.	Cleanaway Site Management / Subcontractors	On-going
The Air Pollution Control System will be operational during the operation of the WTS.	Cleanaway Site Management	On-going
Dust Management		

Control	Responsibility	Timing / Frequency
The premises will be maintained in a condition which minimises or prevents the emission of dust from the premises.	Cleanaway Site Management	On-going

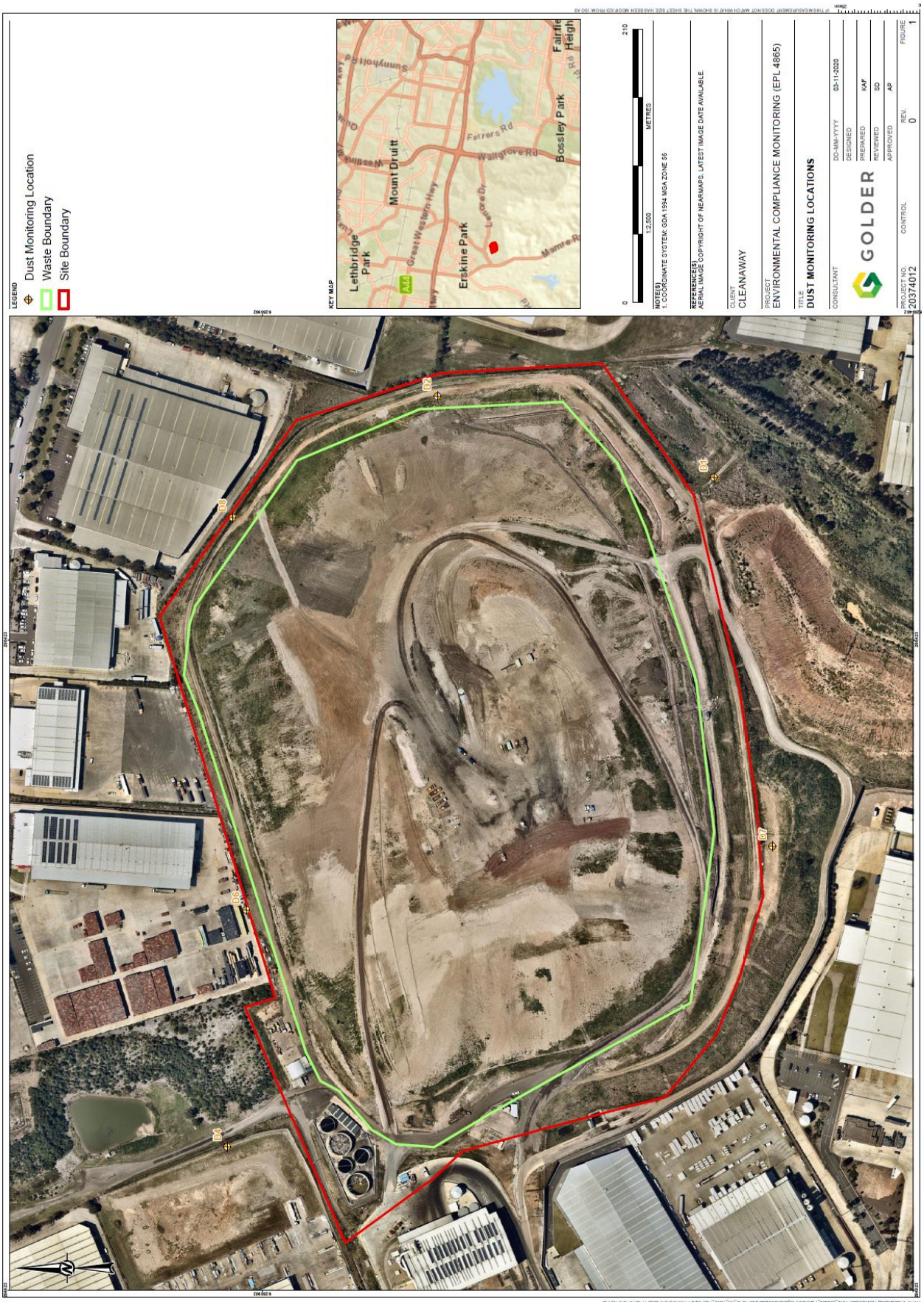

Figure 4 - Current Dust Monitoring Locations at the adjacent Erskine Park Landfill

Table 8 - Air Quality Mitigation Measures (Continued)

Control	Responsibility	Timing / Frequency
Dust suppression through the use of water sprays/misters.	Cleanaway Site Management	On-going
Regularly maintaining on-site surfaces to prevent dust re-entrainment from vehicle movements and other equipment use.	Cleanaway Site Management	On-going
Adequate water supply will be provided on site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.	Cleanaway Site Management	On-going
The integrity of on-site haul routes will be maintained, and any necessary repairs will be undertaken to the surface as soon as reasonably practicable.	Cleanaway Site Management	On-going
All inspections of haul routes and any subsequent action will be recorded in a site log book.	Cleanaway Site Management	On-going
Meteorological Station		
A suitable meteorological station has been installed at the Development site (refer to **Figure 4**) that *complies with the requirements in the latest version of the Approved Methods for Sampling of Air Pollutants in New South Wales*. Cleanaway will operate the meteorological station, and maintain continuous, auditable records of meteorological data, previous 4 years.	Cleanaway Site Management	On-going

4.3 Traffic and Access

Traffic and Access **Table 9** lists the management and mitigation measures that will be implemented at the Development to minimise the impacts of traffic and access. Access to the Development, traffic flow around the Development site and parking areas are illustrated in **Figure 1**. The haulage route of long haul waste transportation trucks from the Erskine Park Industrial Estate to final disposal location is along Quarry Road, James Erskine Drive, Mamre Road, Erskine Park Road, Lenore Drive and the M7, as shown in **Figure 5**, below.

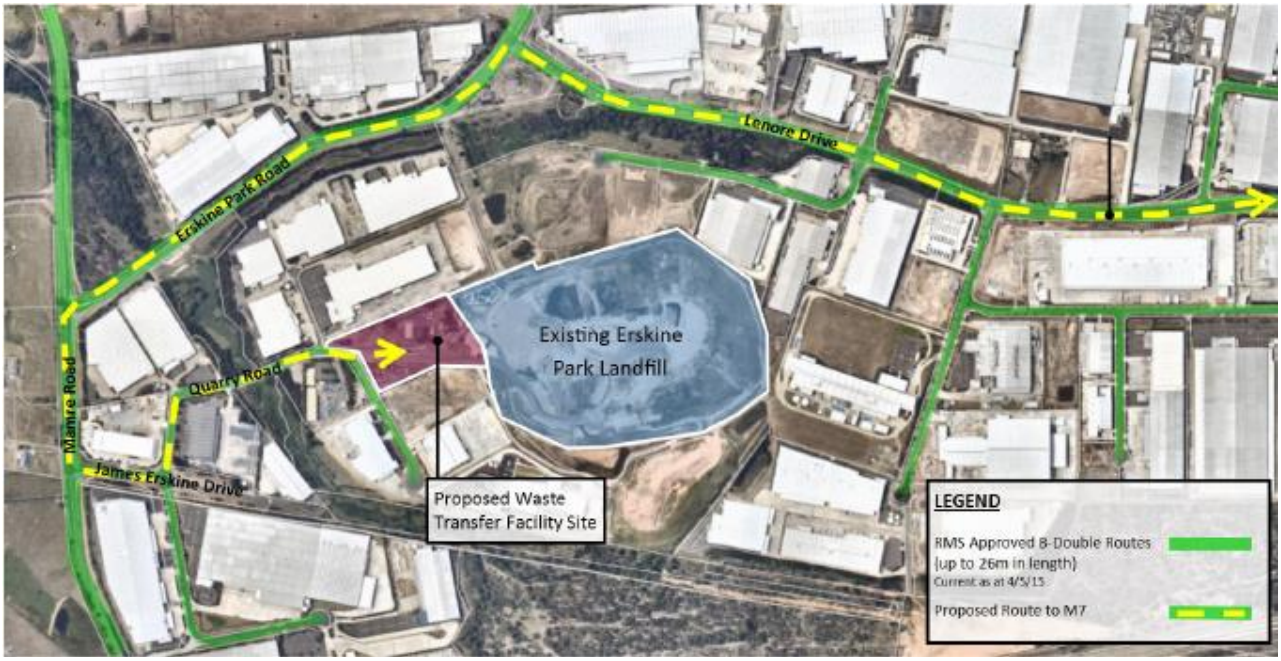

Figure 5 - Haulage Route from M7

Source: Traffic Impact Assessment for Proposed Waste Transfer Station 50 Quarry Road, Erskine Park (Traffix, 2015)

Table 9 - Traffic Management and Mitigation Measures

Control	Responsibility	Timing / Frequency
Trucks will only be parked in the designated truck park areas, per Figure 1.	Cleanaway Site Management	On-going
A total of 37 car parking spaces, including one accessible car parking space will be provided at the Development site.	Cleanaway Site Management	On-going
Site access, driveways and parking areas will be maintained in accordance with the latest versions of Australian Standards AS 2890.1, AS 2890.2, AS 2890.6 and AS 1428.1.	Cleanaway Site Management	On-going
A load compliance inspection via camera view is provided at the Development site.	Cleanaway Site Management	On-going
All vehicles will enter and leave the site in a forward direction.	Cleanaway Site Management / Subcontractors	On-going
Signage will be maintained to ensure safe traffic flow of both Landfill and WTS vehicles.	Cleanaway Site Management	On-going
Designated pedestrian access will be maintained from Quarry Road to the offices.	Cleanaway Site Management	On-going
All vehicles will turn off their engines when stationary (no idling), where practicable.	Cleanaway Site Management / Subcontractors	On-going

Control	Responsibility	Timing / Frequency
Unless such deliveries are via Erskine Park Road, truck deliveries and pickups will be scheduled to avoid busy morning and afternoon peak hours, as far as practicable.	Cleanaway Site Management / Subcontractors	On-going
The egress of appropriate long haul trailers of waste transportation trucks from the Erskine Park Industrial Estate will be confined to Lenore Drive/Erskine Park Link Road.	Cleanaway Site Management / Subcontractors	On-going
The Development will not result in any vehicles parking or queuing on the public road network, where practical.	Cleanaway Site Management / Subcontractors	On-going
All vehicles will be wholly contained on site before being required to stop, where practical.	Cleanaway Site Management / Subcontractors	On-going
All loading and unloading of heavy vehicles will occur inside the WTS.	Cleanaway Site Management / Subcontractors	On-going
The turning areas in the car park will be kept clear of any obstacles, including parked cars, at all times.	Cleanaway Site Management / Subcontractors	On-going
Trucks entering and leaving the premises that are carrying loads will be covered at all times, except during loading and unloading.	Cleanaway Site Management / Subcontractors	On-going

4.4 Noise Management

An Operational Noise Assessment was prepared to accompany the EIS (SLR 2015a) and development application. For the purposes of this assessment environmental noise monitoring was conducted at the potentially most affected (representative) noise-sensitive locations, NM1, NM2, NM3 and NM4 (refer to **Figure 3**).

Unattended Noise Monitoring obtained the Rating Background Levels (RBLs) or background (LA90) noise levels for the noise-sensitive locations, as provided in the table overleaf.

Table 10 – Summary of Existing LA90 (15minute) Rating Background Levels (RBLs) and Existing LAeq(period) Ambient Noise Levels - dBA re 20 µPa

Location	LA90(15minute) Rating Background Level (RBL)			LAeq(period) Existing Ambient Noise Level		
	Daytime 0700-1800 Hours	Evening 1800-2200 Hours	Night-time 2200-0700 Hours	Daytime 0700-1800 Hours	Evening 1800-2200 Hours	Night-time 2200-0700 Hours
NM1 - Mandalong Close	44	45	39	54	54	53
NM2 - Catholic Village	35	38	36	49	43	44
NM3 - Lenore Drive	46	48	44	57	54	53
NM4 - Verdi Glenn	43	41	39	51	53	48

Results of Operator-Attended Noise Monitoring determined the character of the existing background noise levels, refer to **Table 10**.

Table 11 – Operator-Attended Background Noise Survey Results

Location Start Time Conditions	Measurement Description	Primary Noise Descriptor (dBA re 20 µPa)					Description of Noise Emission and Typical Maximum Levels (LAmax)
		LAeq	LA1	LA10	LA50	LA90	
NM1 - Mandalong Close 24/04/2015 1118 hours Temperature at 10m: 20.80C Humidity: 72% Wind At 10m : 1.7 m/s N No Rain	Ambient	50	58	52	48	46	Trucks turning onto Mamre Road 52-57 Engine braking onto Mamre Road 56-62 Cars on Mamre Road 45-50 Truck accelerating on Mamre 51 Engine braking on Mamre 51-55 Plane 50-56
NM2 - Catholic Village 24/04/2015 1155 hours Temperature at 10m: 22.30C Humidity: 70% Wind At 10m : 0.6 m/s NNE No Rain	Ambient	45	50	47	44	42	Birds 41 Resident 47 Erskine Business Park hum 43-44 Banging 46-54 Plane 48-52 Trucks in Erskine Business Park 47
NM3 - Lenore Drive 24/04/2015 1312 hours Temperature at 10m: 24.40C Humidity: 59% Wind At 10m : 1.9 m/s N No Rain	Ambient	54	62	57	51	47	Traffic on Lenore Drive 47-62 Welding 50 Birds 57-67 Distant Traffic 44 Wiper sniper 51-59 Bikes 66-67
NM4 - Verdi Glenn 24/04/2015 1404 hours Temperature at 10m: 25.20C Humidity: 47% Wind At 10m : 1.7 m/s NNW No Rain	Ambient	48	55	48	44	42	Dog 62-75 Traffic 44-50 Birds 46-52 Erskine Business Park hum 37 Insects continuous 31-35 Plane 47

The attended and unattended noise monitoring indicated that the measured ambient noise levels were dominated by traffic noise and Erskine Business Park activities.

In relation to noise, the EIS (SLR, 2015) predicted that there would be negligible impact and the Development would be within EPA criteria at all times. The revised noise assessment for the Mod 3 Environmental Assessment (SLR, 2018) also determined that operational noise emissions from the proposed Erskine Park Transfer Station are predicted to be below or to meet the intrusive (single source) and amenity (background noise) noise trigger levels at all of the noise assessment locations (shown on **Figure 3**).

Subsequently noise monitoring is not required by the conditions for the Development nor have noise limits been set for the Development site, however noise management controls will be implemented during the operation of the Development, in accordance with the conditions of SSD 7075 (refer to **Table 11**).

Table 12 - Recommended LAeq Noise Levels from Industrial Noise Sources

Receiver	Noise Amenity Area	Time of Day[1]	Recommended Amenity Noise Level LAeq(period)
Residence	Rural	Day	50 dBA
		Evening	45 dBA
		Night	40 dBA
	Suburban	Day	55 dBA
		Evening	45 dBA
		Night	40 dBA
	Urban	Day	60 dBA
		Evening	50 dBA
		Night	45 dBA
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks	See column 4	See column 4	5 dB(A) above the recommended amenity noise level for a residence for the relevant noise amenity area and time of day
School classrooms - internal	All	Noisiest 1-hour period when in use	35 dBA
Hospital ward internal external	All	Noisiest 1-hour	35 50
Area specifically for passive recreation	All	When in use	50 dBA
Active recreation area (e.g. School playground, golf course)	All	When in use	55 dBA
Commercial premises	All	When in use	65 dBA
Industrial premises	All	When in use	70 dBA
Industrial (applicable only to residential noise amenity areas)	All	All	Add 5 dB(A) to recommended noise amenity area

Notes 1: Time of day is defined as follows in accordance with NPI 2017:
Day – the period from 7 am to 6 pm Monday to Saturday or 8 am to 6 pm on Sundays and public holidays
Evening – the period from 6 pm to 10 pm
Night – the remaining periods.

If excessive noise levels are experienced at the Development site and/or a noise complaint is received, appropriate remedial actions/additional mitigation measures will be implemented (refer to **Section 7**).

Environmental controls listed in **Table 13** will be implemented to minimise the potential for adverse noise impacts at the nearest receptor locations during the operation of the WTS.

Table 13 - Noise Management and Mitigation Measures

Control	Responsibility	Timing / Frequency
Best management practice will be implemented including all reasonable and feasible noise management and mitigation measures to prevent and minimise operational, low frequency and traffic noise generated by the Development.	Cleanaway Site Management / Subcontractors	On-going
Noise impacts of the Development will be minimised during adverse meteorological conditions.	Cleanaway Site Management	On-going
Noise suppression equipment on plant will be maintained effectively at all times.		
Defective plant will not be used operationally until fully repaired.		
All Cleanaway owned vehicles operating on the site will be fitted with the High and Low Buzzer system, designed to minimise noise associated with reversing alarms in accordance with the Australian Vehicle Standard (Australian Design Rule 42/04) and *Heavy Vehicle (Adoption of National Law) Act 2013*.		
Cleanaway will regularly assess noise emissions and relocate, modify and/or stop operations to ensure compliance with the relevant conditions of SSD 7075.		
Mobile plant operation will primarily occur inside the WTS building and mobile plant will be fitted with low frequency white noise reversing alarms.		
Noise emissions from the WTS will be in compliance with the requirements of the NSW EPA's Industrial Noise Policy.		

4.5 Surface Water

In accordance with condition B16 of SSD 7075 and EPL condition L1.1 a Stormwater Management Scheme (Stormwater Maintenance and Operations Plan [SMOP]) has been prepared for the Development (see **Appendix F**). Implementation of the scheme will mitigate the impacts of stormwater run-off from and within the premises. The scheme is consistent with the Stormwater Management Plan for the catchment.

As detailed in the SMOP stormwater controls for the Development include, but are not limited to:

- 2 x 80kL Rainwater tanks;
- 2 x Stormwater 360 Vortsentry Filtration Units;
- OSD tank system;
- Bio-retention basin including sediment forebay;

- Pit / pipe stormwater conveyance system including trash racks in the OSD tank system;
- Storage of hazardous materials such as the scrubber chemical in bunded areas;
- Oceanguard In-drain Filter Baskets (or equivalent);
- Stormwater Shut-off valve; and
- Spill management practices (refer to **Section 7**).

The SMOP also outlines the storm water quality monitoring for the Development site, as summarised in **Table 14** below.

Table 14 - Stormwater Water Quality Monitoring Program

Parameter	Default Trigger Value*	Inspection Frequency	Responsibility
Total Ammonia (mg/L)	0.9	Monthly during discharge for first year & Bi-annually (6 monthly) during discharge thereafter	Cleanaway
Oil & Grease (mg/L)	5		
pH	6.5 – 8.0		
Salinity (µS/cm)	200 - 300**		
Turbidity (NTU)	6-50 ***		
Total Suspended Solids	50mg/L		

* Default trigger values derived from the ANZECC (2000) guidelines for NSW lowland rivers (slightly disturbed ecosystems).
** NSW coastal rivers typically in the range 200-300 uS/cm.
*** Values at the high end of the range would be found in rivers draining slightly disturbed catchments and in many rivers at high flows.

The SMOP also outlines the stormwater structures monitoring and maintenance program that is summarised in **Table 15.**

Table 15 - Stormwater Structures Monitoring and Maintenance Program

Frequency	Maintenance Task	Responsibility
Daily	• Visual inspection of stormwater drains for debris, odour and/or visible product; • Visual inspection of water level in the stormwater system / pits; • Visual inspection of bunded areas and the removal of built up liquid as soon as practical (if required); • Visual inspection of site for leaks and damage; • Completion of daily litter picking program; • Inspection of retention basin and OSD Tank if significant rainfall has occurred, is predicted to occur or in the event of a spill or leak that has occurred onsite; ○ note - if a spill or leak occurs, the isolation valve should be closed immediately and remain closed until the stormwater system is confirmed as clean.	Operational Team, Site Supervisor and/or Branch Manager
Weekly	• Inspection and if required, cleaning out of stormwater system including the OceanGuards (or equivalent).	Branch Manager (or Delegate i.e. Site Supervisor)

Frequency	Maintenance Task	Responsibility
Monthly	• Monthly Workplace Inspection and implement identified actions.	Branch Manager (or Delegate i.e. Site Supervisor)
6-Monthly	• Stormwater Testing undertake (rainfall dependent) as per the parameters listed in Table 15.	Branch Manager (or Delegate i.e. Site Supervisor)
12-Monthly	• Inspection of entire stormwater system and determine if a thorough clean is required; • Inspection of stormwater shut-off valve to ensure it is sealed and contains liquid onsite when in the closed position; • Annual cleaning of the Vortsentry Water Treatment Devices.	Branch Manager (or Delegate i.e. Site Supervisor)

A Leachate Management System (Protocol) (see **Appendix G**) has been prepared for the Development in accordance with Condition B17 of SSD 7075. The Leachate Management Protocol provides a management protocol for leachate (including firewater), provides controls for leachate (including firewater) so that it does not mix with any stormwater at the Development site and includes water quality monitoring to determine the performance of the leachate management system. As specified by the Protocol, water quality monitoring of the treated leachate in the Leachate Treatment Plant (LTP) will be undertaken in accordance with the existing Trade Waste Agreement. Cleanaway will carry out the Development in accordance with the Leachate Management System.

Table 16 lists additional management and mitigation measures that will be implemented during the operations of the Development to minimise direct and indirect impacts on water. Cleanaway will also comply with Section 120 of the Environment Operations Act 1997.

Table 16 – Surface Water Management and Mitigation Measures

Control	Responsibility	
If the WTS is no longer able to utilise the adjacent Landfill Leachate Treatment System, the leachate collected from the sump will be taken offsite for treatment at an appropriately licenced facility.	Cleanaway Site Management	On-going

4.6 Groundwater

Monitoring is currently undertaken at 13 groundwater bores surrounding the Erskine Park Landfill in accordance with EPL 4865. Three (3) of the groundwater bores (BH5[2], BH17D and BH17E) fall within the boundary of the Development site (see **Figure 4**). Average quarterly results from these monitoring bores serve as baseline data (see **Table 17** below).

Quarterly groundwater monitoring at these bores will be undertaken (in alignment with the requirements of the current landfill EPL). Groundwater samples will be analysed for parameters included in **Table 17,** plus asbestos, Polychlorinated Biphenyls (PCBs) and Organophosphate Pesticides (OPPs).

Table 17 – Baseline Groundwater Monitoring Data

[2] BH5 no longer part of the Landfill monitoring program, therefore the number of groundwater bores has been reduced from 14 to 13.

	BH5	BH17D	BH17E	LOR
Heavy Metals				
Aluminium	<10	<10	70	10
Arsenic	<1	<1	<1	1
Barium	88	14000	2340	1
Beryillium	<1	<1	<1	1
Cadmium	<0.1	<0.1	<0.1	0.1
Cobalt	11	<1	<1	1
Chromium	<1	<1	<1	1
Copper	<1	<1	<1	1
Manganese	225	17	24	1
Nickel	5	1	2	1
Lead	<1	<1	<1	1
Zinc	10	<5	<5	5
Vanadium	<10	<10	<10	10
Mercury	<0.1	<0.1	<0.1	0.1
Chromium	<10	<10	<10	10
Ammonia	0.57	6.81	1.16	0.01
Total Petroleum Hydrocarbons (TPH)				
TPH C_6 – C_9	<20	20	<20	20
TPH C_{10} – C_{14}	<50	<50	<50	50
TPH C_{15} – C_{28}	<100	<100	<100	100
TPH C_{29} – C_{36}	<50	<50	<50	50
TPH C_{10} – C_{36}	<50	<50	<50	50
BTEX				
Benzene	<1	5	<1	1
Toluene	<5	5	<5	2
Ethylbenzene	<2	<2	<2	2
m&p-xylene	<2	<2	<2	2
o-xylenes	<2	<2	<2	2
Polynuclear Aromatic Hydrocarbons (PAHs)				
Acenaphthene	<1.0	<1.0	<1.0	1.0
Acenaphthylene	<1.0	<1.0	<1.0	1.0

Anthracene	<1.0	<1.0	<1.0	1.0
Benzo(a)pyrene	<1.0	<0.5	<0.5	1.0
Benzo(b+k)fluoranthene	<0.5	<1.0	<1.0	1.0
Benzo(g,h,i)perylene	<1.0	<1.0	<1.0	1.0
Chrysene	<1.0	<1.0	<1.0	1.0
Dibenzo(a,h)anthracene	<1.0	<1.0	<1.0	1.0
Fluoranthene	<1.0	<1.0	<1.0	1.0
Fluorene	<1.0	<1.0	<1.0	1.0
Indeno(1,2,3-c,d)pyrene	<1.0	<1.0	<1.0	1.0
Naphthalene	1.0	<1.0	<1.0	1.0
Phenanthrene	<1.0	<1.0	<1.0	1.0
Pyrene	<1.0	<1.0	<1.0	1.0
Total PAHs	<0.5	<0.5	<0.5	0.5
Organochlorine Pesticides (OCPs)				
Hexachlorobenzene	<0.5	<0.5	<0.5	0.5
Alpha-BHC	<0.5	<0.5	<0.5	0.5
Beta-BHC	<0.5	<0.5	<0.5	0.5
Gamma - BHC	<0.5	<0.5	<0.5	0.5
Delta-BHC	<0.5	<0.5	<0.5	0.5
Heptachlor	<0.5	<0.5	<0.5	0.5
Aldrin	<0.5	<0.5	<0.5	0.5
Heptachlor epoxide	<0.5	<0.5	<0.5	0.5
Trans-Chlordane	<0.5	<0.5	<0.5	0.5
Alpha-Endosulfan	<0.5	<0.5	<0.5	0.5
Cis-chlordane	<0.5	<0.5	<0.5	0.5
Dieldrin	<0.5	<0.5	<0.5	0.5
4, 4-DDE	<0.5	<0.5	<0.5	0.5
Endrin	<0.5	<0.5	<0.5	0.5
Beta-Endosulfan	<0.5	<0.5	<0.5	0.5
4, 4’ – DD D	<0.5	<0.5	<0.5	0.5
Endrin aldehyde	<0.5	<0.5	<0.5	0.5
Endo sulfan sulfate	<0.5	<0.5	<0.5	0.5
4, 4’ - DDT	<2	<2	<2	2

Endrin Ketone	<0.5	<0.5	<0.5	0.5
Methoxychlor	<2	<2	<2	2
Total Phenols				
2, 4, 5- Trichlorophenol	<1	<1	<1	1
2, 4, 6- Trichlorophenol	<1	<1	<1	1
2, 4- Dichlorophenol	<1	<1	<1	1
2, 6- Dichlorophenol	<1	<1	<1	1
2, 4- Dimethylphenol	<1	<1	<1	1
2- Chlorophenol	<1	<1	<1	1
2- Methylphenol	<2	<2	<2	2
2- Nitrophenol	<1	<1	<1	1
3- & 4 - Methylphenol	<2	<2	<2	2
4- Chloro – 3-methylphenol	<1	<1	<1	1
Pentachlorophenol	<2	<2	<2	2
Phenol	<1	<1	<1	1

Groundwater quality criteria/limits have not been set for the site. However, EPL 4865 sets a detection limit for ammonia (15 mg/L). If an ammonia level of 15 mg/L or more is detected, confirmation sampling will be undertaken, and a report will be prepared that proposes actions for Cleanaway to implement (including timeframes) to prevent the release of contaminated groundwater from the premises.

4.7 Waste Management

In accordance with the SSD 7075 Statement of Commitments, an Operational Waste Management Plan (OWMP) has been prepared for the Development (refer to **Appendix H**). The OWMP proposes a number of mitigation measures to manage waste generated by the Development. The OWMP also includes a Waste Monitoring Program that will be implemented during the operation of the Development, in accordance with Condition B2.

The OWMP also outlines if hazardous or other prohibited waste, such as asbestos, is received at the site, it will be disposed of in accordance with SafeWork NSW, Comcare and NSW Environment Protection Authority (EPA) requirements. Cleanaway staff will also receive adequate training in order to be able to recognise, handle and report any hazardous or other prohibited waste received at the site.

Waste management and mitigation measures, additional to those proposed in the OWMP, which will be implemented at the Development Site are outlined in **Table 18**.

Table 18 - Waste Management and Mitigation Measures

Control	Responsibility	Timing / Frequency
No materials or waste (as defined by the POEO Act) generated outside the Site will be received at the Site		On-going

Control	Responsibility	Timing / Frequency
for storage, treatment, processing or reprocessing except as expressly permitted by the EPL.	Cleanaway Site Management	
Cleanaway will not receive or process on the site more than 300,000 tonnes of waste per calendar year.		
Cleanaway will record the amount of waste (in tonnes) received at the Site on a daily basis.		
Waste and recycling will be collected by Cleanaway on an as needed basis.		
Subcontractors will be informed of site waste management procedures.		
Liquid and non-liquid waste(s) will not be unlawfully deposited on the premises.		
Waste received at the WTS is assessed and classified in accordance with the EPA's *Waste Classification Guidelines* as in force, from time to time.		
Trucks entering and leaving the premises that are carrying loads will be covered at all times, except during loading and unloading.	Cleanaway Site Management / Subcontractors	On-going

4.8 Visual Amenity and Landscaping

A Landscape Plan has been prepared for the Development and is contained within **Appendix I**. Landscaping will be maintained in accordance with the Landscape Plan.

Erskine Park is located in Key Precinct E6 - Erskine Business Park, as defined by the Council Development Control Plan (DCP). The Landscape Plan is consistent with the requirements Landscape Design requirements of Key Precinct E6 as it has the following inclusions:

- Existing trees removed from site identified on the landscape plans;
- Tree species are selected from locally occurring species. These trees will contribute to wildlife habitat, and the overall character of the locality;
- Endemic trees and shrubs have been used. The property entrance has been highlighted with feature planting. Of particular consideration is the need to preserve the sightlines for trucks entering / exiting the facility;
- Plants nominated are not weed species; and
- Additional street trees have been nominated.

Other requirements of the DCP that have been achieved by the Landscape Plan include:

- Screening of driveway areas (particularly on the southern boundary where space is limited, and behind the front fence);
- Screening of carpark areas, and tree planting in carpark areas - this will be completed in future stages; and
- Screening of the facility at the front boundary- there is limited space for additional screening behind the front fence due to the below ground On-Site Detention (OSD) tank.

The Plant Schedule (Species List) is included on the Landscape Plans (L02 to L05). Species that have been planted at the Development site include:

- *Corymbia Maculata*;
- *Eucalyptus Tereticornis*;
- *Eucalyptus Fibrosa*;
- *Melaleuca Decora;*
- *Callistemon Viminalis 'Slim'*;
- *Lomandra Multiflora*;
- *Lomandra 'Tanika'*;
- *Elaeocarpus Reticulatus*;
- *Callistemon Salignus*;
- *Doryanthes Excelsa*;
- *Carex Appressa*;
- *Isolepis Nodosa*; *and*
- *Westringia 'Mundi'*.

Table 19 lists the management and mitigation measures that will be implemented at the Development site to minimise direct and indirect impacts on the visual amenity and landscaping.

Table 19 - Visual Amenity and Landscaping Management and Mitigation Measures

Control	Responsibility	Timing / Frequency
The Development will be carried out in accordance with the approved Landscape Plan.	Cleanaway Site Management	On-going
All external lighting are mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, properties and roadways. The lighting is the minimum level of illumination necessary and shall comply with Australian Standard AS 4282 1997.		
Any new signage will be installed in consultation with Council and shall comply with the State Environmental Planning Policy 64 – Advertising and Signage, as relevant.		Before the installation of any signage
Disturbed areas will be rehabilitated upon completion of construction.		Ongoing
Black palisade fencing has been constructed behind landscaping fronting on to Quarry Road. The fencing will be maintained throughout the operation of the WTS.		
A 12.7 metre long x 3 metre high x 1.5 metre wide screen will be maintained on the western side of the office.		
Trees and shrubs will be maintained on the western edge of the Development site.		

4.9 Heritage

Table 20 lists the management and mitigation measures that will be implemented during operation of the Development to minimise potential impacts on heritage.

Table 20 - Heritage Management and Mitigation Measures

Control	Responsibility	Timing / Frequency
Should any Aboriginal cultural object(s) be uncovered all works will stop immediately and the NSW police, OEH and the Aboriginal community will be notified. Works will only recommence when an appropriate and approved management strategy has been agreed to by all of the relevant stakeholders.	Cleanaway Site Management	On-going

Unexpected Finds Protocol

The following Unexpected Finds Protocol will be following in the event that any archaeological or Aboriginal objects are discovered during operations at the Development site:

a) **Cease work in the area immediately** - employees or contractors to cease work in the area immediately and contact Cleanaway Site Management / Principal Contractor;

b) **Barricade** - Cleanaway Site Management / Principal Contractor to erect temporary barricading around the find to prevent access and/or disturbance;

c) **Notify** - advise the relevant regulatory agencies (**Table 5** lists the contact details for the regulatory authorities that have an interest in the operations of the Development) and adhere to any instructions issued by them -

   (i) For archaeological finds notify the OEH Heritage Branch; and

   (ii) For Aboriginal finds notify the OEH Regional Operations Group;

d) **Management strategy** - an appropriate management strategy will be developed in consultation with the relevant stakeholders; and

e) **Recommence works** - works are only to recommence once an appropriate and approved management strategy has been agreed by all relevant stakeholders.

4.10 Contamination

Table 21 lists the management and mitigation measures that will be implemented during operation of the Development to minimise the potential for contamination.

Table 21 - Contamination Management and Mitigation Measures

Control	Responsibility	Timing / Frequency
All chemicals, fuels and oils used on site will be stored in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participant's Manual 2007 (where applicable).*	Cleanaway Site Management	On-going
Accidental spillage or poor management of fuels, oils, lubricants, hydraulic fluids, solvents and other chemicals during the operation of the Development will be controlled through spill management actions to prevent water quality and ecological impacts in South Creek.		
Spills, leaks or other discharge of any waste(s) or other material(s) will be cleaned up as soon as practicable after it becomes known.		
Dangerous goods will be stored on site according to their respective ADG classes and compatibility.		

5. Inspections, Audits, Reporting and Records

5.1 Inspections

There are no specific inspection requirements as part of the Development Consent (SSD 7075) or the site's EPL. Notwithstanding, various environmental site inspections will be undertaken monthly whilst the site operates, to ensure on-going implementation and compliance with this OEMP and to identify any adverse impacts and required remedial actions. The environment site inspections to be completed are listed in **Table 22**.

Table 22 - Site Environmental Inspections

Requirement	Responsibility	Timing / Frequency
Environmental site inspections to assess the implementation of the management and mitigation measures and compliance with Development Consent SSD 7075 (as modified) and this OEMP.	Cleanaway Site Management	Monthly
Inspection of rehabilitated areas to: • Assess the success of revegetation; • Identify any required maintenance works (e.g. watering, re-seeding, fertiliser application); and • Remove temporary erosion and sediment controls on completion of the rehabilitation works.		Monthly following completion of disturbance activity until fully rehabilitated (i.e. >70% permanent ground cover excluding weeds)

Where any of the controls are observed to be not functioning correctly and/or adverse environmental impact/risk is observed, appropriate remedial actions and/or additional mitigation measures will be promptly implemented. Remedial actions/additional mitigation measures may include:

- Clean-up spills;
- Implementation of the unexpected finds protocol in the event that any archaeological or Aboriginal objects are uncovered;
- Undertake maintenance works where revegetation has failed;
- Undertake additional noise mitigation measures (i.e. reduce operational activity in adverse weather conditions);
- Provide additional training to site personnel/contractors;
- Undertake housekeeping (general clean-up) of the Development site;
- Bring in outside resources such as specialist contractors/consultants (i.e. for management of contaminated material); and
- Implement additional weed control to control declared noxious weeds (i.e. spraying).

Where considered necessary, the relevant government agencies will be consulted, and any additional instructions will be adhered to. Once the impact/risk has been suitably addressed, appropriate preventative measures will be identified and implemented to negate the possibility of re-occurrence.

5.2 Independent Environmental Audit

In accordance with Condition C8 and C9 of SSD 7075 (as modified) Cleanaway will conduct an Independent Environmental Audit (IEA) within 1 year of the date of the commencement of operation of the Development, and every 3 years afterward. The audit will be:

a) Conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by DPE (the Secretary of);

b) Will be led by a suitably qualified auditor, and include experts in fields specified by the Secretary;

c) Will include consultation with the relevant agencies;

d) Will assess the environmental performance of the Development and assess whether it is complying with the requirements of any relevant approvals and the site's EPL/s (including any assessment, plan or program required under the approvals);

e) Will review the adequacy of any approved strategy, plan or program required under SSD 7075 and the EPL; and

f) Will recommend measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or program required under the SSD 7075 (as modified).

Within 3 months of commissioning the audit (or otherwise agreed by the Secretary), Cleanaway will submit a copy of the audit report to the Secretary, together with its response to any recommendations included in the audit report.

5.3 Reporting

Annual Review

In accordance with Condition C10 of Development Consent SSD 7075 (as modified), Cleanaway will prepare and submit an Annual Review to the DPE that reviews the environmental performance of the Development over the previous year. The first Annual Review will be submitted to DPE within 1 year of commencement of construction of the WTS.

In accordance with Condition C13, the Annual Review's (atleast 4 years' worth) will be made publicly available on Cleanaway's website. The Annual Review will inform the local community and relevant agencies about the operation and environmental performance of the Development.

Annual Return

On a yearly basis, Cleanaway will complete and supply to the EPA an Annual Return comprising:

- A Statement of Compliance;
- A Monitoring and Complaints Summary;
- A Statement of Compliance – Licence Conditions;
- A Statement of Compliance – Load Based Fee;
- A Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan;
- A Statement of Compliance – Requirement to Publish Pollution Monitoring Data; and
- A Statement of Compliance – Environmental Management Systems and Practices.

The Annual Return will be prepared by completing the Annual Return form provided by the EPA. Within the Annual Return, the Statement of Compliance will be certified, and the Monitoring and Complaints Summary signed.

The Annual Return will be submitted no later than 60 days after the end of the reporting period. A copy of the Annual Return will be retained for a period of at least 4 years after the Annual Return was supplied to EPA.

Regular Reporting

In accordance with Condition C7 of Development Consent SSD 7075 (as modified), Cleanaway Site Management will provide regular reporting on the environmental performance of the Development on the Cleanaway website, in accordance with the reporting arrangements in plans and programs approved under the conditions of Development Consent SSD 7075 (as modified).

5.4 Records

Monitoring records required by EPA will be kept in a legible form for at least 4 years after the monitoring event. Cleanaway management will produce the records to any authorised officer of the EPA that asks to see them. The records will include:

a) The date on which the sample was taken;
b) The time at which the sample was collected;
c) The point at which the sample was taken; and
d) The name of the person who collected the sample.

5.5 Cleanaway Website

A copy of this OEMP and the Operational Waste Management Plan (OWMP) will be posted on the Cleanaway Corporate website.

6. Complaints Management Strategy

6.1 Performance Objective

To ensure all environmental complaints regarding the operation of the Development are promptly and effectively received, handled and addressed.

6.2 Responsibility

Cleanaway Site Management is responsible for ensuring that the appropriate management response and handling procedures are instigated and carried through in the event of a complaint.

All employees and contractors who receive a complaint, either verbal or written, are to immediately notify Site Management.

6.3 Receipt of Complaints

Complaints in relation to the Developments activities may be received via any of the following ways:

- Any Cleanaway company or site office;
- Cleanaway Complaints and Feedback number - 1800 213 753;
- Cleanaway Internet enquiry – http://www.cleanaway.com.au/contact-us/; and/or
- Through a government agency (i.e. Council or EPA).

The complaint and feedback number are advertised on Cleanaway's website, and at the facility.

6.4 Handling Procedure

Upon becoming aware of a complaint, Cleanaway Site Management is to undertake the following:

1 Receive

In the normal course of events, the first contact for complaints will usually be made in person or by telephone. While this should instigate investigative action, a formal written complaint should be requested.

Where the initial contact reaches an employee or contractor who is not a representative of Site Management, the call should be directed to Site Management. If unavailable, the complainant's details should be taken with a view to returning the contact once Site Management is in a position to discuss the matter.

The complainant's name, address and contact details, along with the nature of the complaint, must be requested. If the complainant refuses to supply the requested information, a note should be made on the form and complainant advised of same. The date and time of the complaint will also be recorded along with the method the complaint was made.

2 Assistance

Where assistance is required handling the situation, Cleanaway's NSW Environment Manager (or equivalent role) should be contacted.

Where the complaint is reported via a government agency (i.e. Council or the EPA), Cleanaway's NSW Environment Manager must be notified immediately (even if outside of normal business hours).

Relevant contact details are listed in **Table 4**.

3 Investigate

A field investigation should be initiated in an attempt to establish the legitimacy of the complaint and the cause of the problem. Cleanaway Site Management should be consulted to identify any abnormality or incident that may have resulted in the complaint. Details may include heavy vehicle activity, equipment and machinery activities, etc.

If the complaint is due to an environmental incident, the management system outlined in **Section 7** should be followed, and if the incident has caused or threatens to cause material harm to the environment each of the relevant regulatory agencies must be immediately notified.

4 Action

Once the legitimacy and cause of the complaint has been established, every possible effort must be made to undertake appropriate remedial action(s) to fix the cause of the complaint and mitigate any further impact.

5 Inform

The investigative work and remedial action should be reported back to the complainant and, if necessary, the relevant regulatory agencies.

6 Record

Every complaint received is to be recorded within the complaints register located in Cleanaway's electronic record system, "Myosh". If the "Myosh" system is unavailable, then the complaint is to be recorded on Cleanaway's Incident Non Conformance Report Form contained within **Appendix J.**

The complaints register will be updated on a monthly basis and made publicly available on the Cleanaway website, as per Condition C13 of Development Consent SSD 7075 (as modified). The complaints register will record the action taken by Cleanaway in relation to the complaint or if no action taken the reason why no action was taken. Complaint records will be kept for at least 4 years after the complaint was made.

6.5 Preventative Action

Once the complaint has been suitably handled, appropriate preventative measures will be identified and implemented to negate the possibility of re-occurrence.

6.6 Dispute Resolution

In accordance with condition A13 of SSD 7075, in the event that a dispute arises between Cleanaway and Council or a public authority, in relation to an applicable requirements of the Development Consent or relevant matter relating to the site, either party may refer the matter to the DPE (Secretary of) for resolution. The Secretary's determination of any such dispute must be final and binding on the parties.

In the case of a dispute between Cleanaway and a community member/complainant, either party may refer the matter to the DPE and/or relevant regulatory authority for consideration, advice and/or negotiation. If the matter escalates, a third party mediator may be required.

7. Environmental Incidents Management Strategy

The following procedure is for environmental incidents that have the potential to cause material harm to the environment. Smaller, minor incidents will be managed in accordance with the Development site's Pollution Incident Response Management Plan (PIRMP) (refer to **Appendix K**).

7.1 Performance Objective

To ensure that any environmental incident caused by or relating to the operation of the Development is effectively responded to, and any resulting adverse environmental and/or community impact is promptly prevented or effectively managed.

7.2 Responsibility

Cleanaway Site Management is responsible for ensuring that the appropriate management response and handling procedures are instigated and carried through in the event of an environmental incident.

All employees and contractors are to:

- Take immediate action to notify Cleanaway Site Management of any environmental incident; and
- Take immediate action (where it is safe to do so) to prevent, stop, contain and/or minimise the environmental impact of the incident.

7.3 Handling Procedure

Upon becoming aware of an environmental incident, Cleanaway Site Management is to undertake the following:

1 Preventative Action

Where possible and it is safe to do so, immediate action should be taken to prevent, stop, contain and/or minimise the environmental impact of the incident. This may include:

a) Making all efforts to contain all fire water at the Development site;

b) Making all efforts to control air pollution from the Development site;

c) Making all efforts to contain any discharge, spill or run-off from the premises;

d) Making all efforts to prevent flood water entering the premises; and

e) Making the WTS secure.

In the unlikely event that a pollution incident requires the evacuation of the Site, actions will be completed in accordance with the Site Emergency Plan. All employees and contractors are informed of the location of emergency assembly areas through site inductions, signage and toolbox talks.

2 Notify

Under the provisions of the POEO Act, there is a duty to notify any incident that has caused or threatens to cause material harm to the environment and all relevant information about the incident. This duty extends to the following:

a) A person engaged as an employee or contractor must, immediately after becoming aware of the incident, notify the employer of the incident and all relevant information. If the employer cannot be contacted, the person is required to notify each relevant authority and provide all relevant information; and

b) An employer who is notified of an incident or who otherwise becomes aware of an incident must, immediately after becoming aware of the incident, notify each relevant authority and provide all relevant information.

Under the POEO Act, the "relevant authority" means any of the following:

- The appropriate regulatory authority (refer to **Table 5**, above);
- If the EPA is the appropriate regulatory authority - the EPA;
- If the EPA is not the appropriate regulatory authority - the local authority for the area in which the pollution incident occurs (i.e. Council);
- NSW Health;
- Comcare; and
- Fire and Rescue NSW.

Relevant contact details are listed in **Table 5** lists the contact details for the regulatory authorities that have an interest in the Development.

Cleanaway will provide written details of the notification to the Secretary (DPE), EPA and any other relevant agencies within 7 days of the date on which the incident occurred.

In the event of a serious incident or emergency, it is more than likely that the Fire and Rescue NSW and/or the EPA will take control and manage the required investigation and remedial activities. Any instructions issued must be strictly adhered to.

3 Assistance

Where assistance is required handling the situation, Cleanaway's Site Manager should be contacted.

Where the incident is reported via a government agency (i.e. Council or the EPA), Cleanaway's NSW Environment Manager must be notified immediately (even if outside of normal business hours).

If adequate resources are not available and the incident threatens public health, property or the environment, it is essential that Fire and Rescue Service NSW and/or the EPA be contacted. Relevant contact details are listed in **Table 5** lists the contact details for the regulatory authorities that have an interest in the Development.

4 Investigate

Undertake immediate investigative work to determine the cause of the incident.

5 Remedial Action

Undertake appropriate remedial action to address the cause of the incident and mitigate any further environmental impact. In some instances, outside resources such as specialist contractors/consultants may be required.

Remedial action may include:

a) Remediate and rehabilitating any exposed areas of soil and/or waste; and

b) Monitoring surface water leaving the premises.

6 Record

An assessment of the incident will be conducted and documented to minimise the potential for similar events in the future. Every environmental incident will be recorded in Cleanaway's electronic record system "Myosh". If "Myosh" is unavailable, then the incident will be recorded on Cleanaway's Non Conformance Report Form included within **Appendix J**. A copy of all completed forms should be maintained for at least four years.

7 Review

In the instance an incident report is submitted, the Environmental Incident Management Strategy will be reviewed within 3 months of the submission, as per Condition C11 of Development Consent SSD 7075 (as modified).

7.4 Preventative Action

Once the incident has been suitably handled, appropriate preventative measures should be identified and implemented to negate the possibility of re-occurrence.

8. OEMP Review

This OEMP will be reviewed and, if necessary, revised within 3 months (as per Condition C11 of Development Consent SSD 7075) in the following circumstances:

- Submission of an Annual Review;
- Submission of a Significant Incident Report;
- Submission of an IEA; or
- Modification to the Development Consent (SSD 7075).

All employees and contractors will be informed of any significant revisions to the OEMP by Cleanaway Site Management during a toolbox talk.

9. References

ANZECC & ARMCANZ (2000) guidelines.

Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018) guidelines.

DPE (2004) Guideline for the Preparation of Environmental Management Plans.

EME Advisory (2018) Erskine Park Waste and Resource Management Facility - Modification to approved SSD 7075 Environmental Assessment Report.

EME Advisory (2022) Erskine Park Waste and Resource Management Facility - Modification to approved SSD 7075 Environmental Assessment Report.

EPA (2017) Noise Policy for Industry (NPfi).

EPA (2014) Waste Classification Guidelines.

SLR (2015a) Erskine Park Resource Management Facility. Staged SSD (SSD – 7075) Concept Plan and Stage 1 Waste Transfer Station. Environmental Impact Statement (EIS).

SLR (2015b) Erskine Park Resource Management Facility. Staged SSD (SSD – 7075) Concept Plan and Stage 1 Waste Transfer Station. Response to Submissions (RTS).

SLR (2017) Environmental Assessment (EA) – Proposed minor changes to approved Erskine Park Resource Management Facility (SSD 7075) Stage 1 Waste Transfer Station.

SLR (2018) Erskine Park Waste Transfer Station. Operational Noise Assessment. Modification with a Sort Line and Shredder.

Appendix A - Development Consent

Appendix B – Consultation Register and Evidence

Appendix C – Sydney Water Approvals

Appendix D - Odour Management Plan

Appendix E - Stormwater Maintenance and Operations Plan

Appendix F - Leachate Management System

Appendix G - Operational Waste Management Plan

Appendix H - Landscape Plan

Appendix I – Incident Non Conformance Report Form

Appendix J – Pollution Incident Response Management Plan (PIRMP)