# Erskine Park Landfill – Relocation of Landfill Gas Pipeline

# Section 4.55(2) Modification Statement of Environmental Effects

Prepared for:

**Enviroguard Pty Ltd** 

Prepared by:



May 2020

# Erskine Park Landfill – Relocation of Landfill Gas Pipeline Section 4.55(2) Modification – Statement of Environmental Effects

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Address: 4 Quarry Road, Erskine Park NSW 2759 (accessed via 85-87 Quarry Road)

**MODIFICATION** 

Title: Erskine Park Landfill – Relocation of Landfill Gas Pipeline

Description: Proposed modification of Development Consent DA 13/0655 to relocate part of

the existing landfill gas pipeline to make way for additional landfill airspace

works

Site: Lot 4 DP 1094504 and Part Lot 103 DP 1143935

4 Quarry Road, Erskine Park NSW 2759 (accessed via 85-87 Quarry Road)

Local Government Area: Penrith

#### **STATEMENT**

This Statement of Environmental Effects has been prepared by EME Advisory in accordance with the brief provided by Enviroguard Pty Ltd and is for the sole use of Enviroguard Pty Ltd. EME Advisory confirms that this Statement of Environment Effects:

- Contains all available information that is relevant to the environmental assessment of the proposal;
- Is true in all material particulars and does not materially mislead by its presentation or omission of information.

**EME Advisory** 

Brian aller

Brian Cullinane Eryn Bath
1 May 2020 1 May 2020

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# 1 INTRODUCTION

#### 1.1 Overview

Enviroguard Pty Ltd (Enviroguard) owns and operates the Erskine Park Landfill (non-putrescible landfill) at Erskine Park in the Penrith Local Government Area (LGA) in western Sydney, New South Wales (NSW).

The landfill was originally granted Development Consent DA 163/92 by Penrith City Council (Council) in 1992 under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This consent permitted the rehabilitation of a former quarry via the disposal of non-putrescible waste materials, along with site rehabilitation and cessation of landfilling. Council subsequently issued Development Consent DA 05/1740 in 2006 under Part 4 of the EP&A Act for on-going landfilling with non-putrescible waste and site rehabilitation to a revised landform, with no changes to the previously approved landfilling rates.

In July 2014, Council issued Development Consent DA 13/0655 to construct and operate a pipeline measuring 4.7 kilometres (km) from Erskine Park Landfill to a brick manufacturing plant owned and operated by the Austral Bricks Company Pty Ltd (Austral Bricks) in Horsley Park. As the pipeline route also extends across the adjoining Fairfield LGA, Fairfield City Council issued Development Consent 301.1/2013 in July 2014 for the section of pipeline within its LGA. The pipeline transfers the landfill gas to fire kilns at the brick manufacturing plant.

This Statement of Environmental Effects (SEE) has been prepared by EME Advisory (EME) to accompany an application from Enviroguard seeking to modify Development Consent DA 13/0655 under section 4.55(2) of the EP&A Act to relocate part of the landfill gas pipeline to make way for landfill airspace expansion works (subject to a separate application to Council – DA 20/0189). The relocation is limited to approximately 800 metres (m) of the pipeline contained within the landfill site itself and one adjoining land parcel. The remaining 3.9 km of the pipeline route connecting the landfill to Austral Bricks, including the entire section through the Fairfield LGA, will remain unchanged.

This SEE presents a focussed evaluation of the modification, including relevant environmental considerations, and has been prepared in consideration of input received from Council and relevant specialist consultants.

#### 1.2 The Applicant

While the applicant for the original Development Consent DA 13/0655 was Austral Bricks Company Pty Ltd, the applicant for the proposed modification is Enviroguard Pty Ltd.

Enviroguard is a subsidiary of Cleanaway Waste Management Pty Ltd (Cleanaway), Australia's leading total waste management solutions company employing over 5,500 people across Australia. The company services customers ranging from councils, residences and small businesses to large multi-national commercial and industrial organisations across a range of different industries.

Cleanaway operates over 200 facilities across Australia, including more than 50 technical treatment and processing plants and more than 45 resource recovery, recycling, and baling plants. The company works with over 80 municipal councils to facilitate best practice recycling and waste management outcomes.

# 1.3 Strategic Context and Relationship to DA 05/1740

Operations at the Erskine Park Landfill are undertaken in accordance with Development Consent DA 05/1740 (as modified), servicing the waste disposal needs of a growing western Sydney region. Up to 1 million tonnes of non-putrescible waste per annum has been accepted for landfilling since commencing operation in 1993 during peak times, although this has declined in recent years as landfill airspace reduces and off-site recycling activity has increased.

The landfill is approaching end-of-life and given the high demand for non-putrescible waste disposal within the Sydney market, Enviroguard investigated options to extend the lifespan of the landfill. The preferred option is the installation of a mechanically stabilised earth (MSE) wall along the south-western, southern and eastern perimeters to provide an additional airspace of approximately 420,000 cubic metres (m³) and extend the life of the landfill by around 3 years. This is the subject of a separate application (DA 20/0189) lodged with Council on 9 April 2020 to modify Development Consent DA 05/1740.

Providing additional capacity at the existing landfill site enables the continued use of the existing development site and the existing approved landfill facility, as opposed to developing a new landfill site, which would be difficult to find in the Sydney region. Without the wall, the landfill is expected to reach capacity (i.e. reach the approved final top of waste landform) by December 2021. Ongoing landfill capacity at Erskine Park will help to maintain competition in the Sydney dry landfill market, benefitting businesses and government who need to access landfill capacity at competitive rates.

The relocation of the gas pipeline, as detailed in this SEE, is required to accommodate the installation of the proposed MSE wall. The wall would restrict access to the pipeline in its current location, with the proposed relocation providing for on-going access for maintenance and operation for gas supply to Austral Bricks.

# 1.4 Approval Pathway

Enviroguard is seeking to modify Development Consent DA 13/0655 under section 4.55(2) of the EP&A Act to relocate part of the landfill gas pipeline. This SEE demonstrates that the pipeline, as proposed to be modified, will be substantially the same development for which consent was originally granted and the associated environmental impacts are expected to be negligible or minor.

The section 4.55(2) pathway is considered further in **Section 5.1**.

#### 1.5 Consultation

A pre-application meeting was held with Council on 14 January 2020 to discuss the proposed MSE wall (subject to a separate modification application - see **Section 1.3**). The need to realign part of the landfill gas pipeline was also discussed during this meeting, with Council advising in its pre-lodgement advices dated 15 January 2020 (see **Appendix A**):

With regards to the relocation of the gas pipeline associated with DA13/0655, as the development was integrated and fairly complex in relation to concurrences and referrals (EPA, RMS, Office of Water and Sydney Catchment Authority) that a separate modification application be pursued.

The section 4.55(2) approval pathway (see **Sections 1.4** and **5.1**) provides for referral and general terms of approval from relevant secondary approval authorities (if necessary).

# 2 SITE DESCRIPTION

# 2.1 Regional Context

The Erskine Park Landfill is located within the broader Western Sydney Employment Area (WSEA) (Precinct 7 Erskine Park Lands) approximately 50 km from the Sydney central business district. The WSEA was established by the NSW government to provide businesses in the region with new land for industry and employment, including transport and logistics, warehousing and office space. The WSEA is now the largest employment area in NSW covering approximately 2,450 hectares across four LGAs, these being Penrith, Blacktown, Fairfield and Holroyd.

#### 2.2 Site Overview

As shown on **Figures 1, 2** and **3**, the site for the proposed modification comprises two land parcels in the Penrith LGA:

- Lot 4 Deposited Plan (DP) 1094504, addressed to 4 Quarry Road, Erskine Park. This lot comprises approximately 21.94 ha and is occupied by the existing Erskine Park Landfill; and
- Part Lot 103 DP 1143935 adjoining the landfill site to the south. This lot is essentially vacant land, with a clay stockpile destined for use on the landfill cap as part of closure.

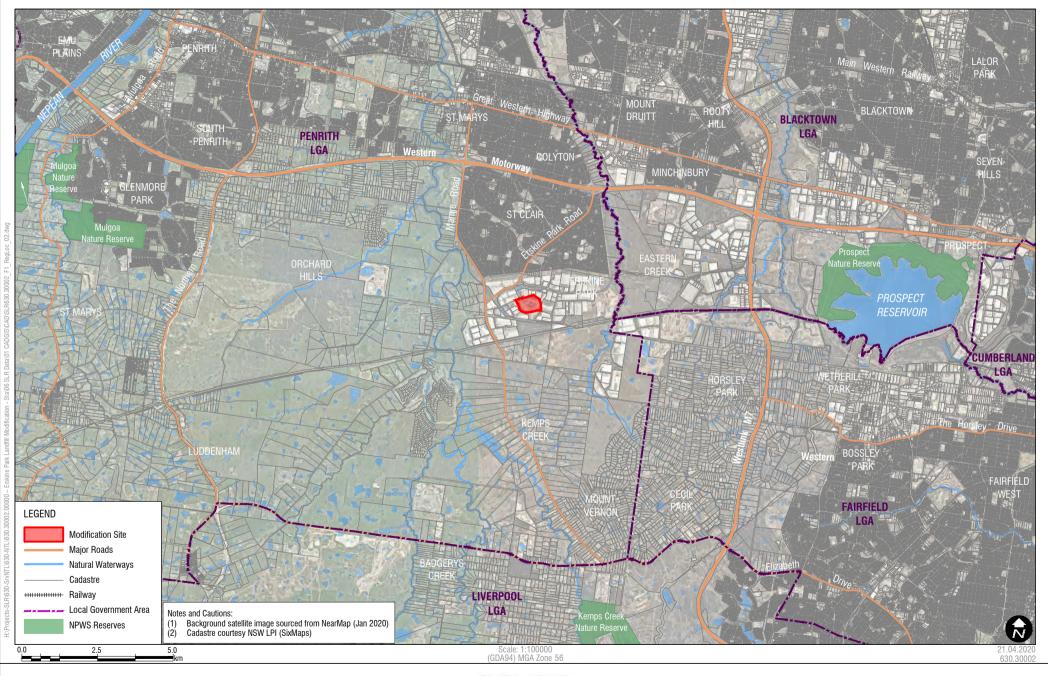
While the landfill site does not have frontage to a public road, it gains vehicular access from Quarry Road via a shared access through the adjoining Lot 1 DP 1140063 (85-87 Quarry Road), which encompasses Cleanaway's Erskine Park Waste and Resource Management Facility. Quarry Road provides connection to Mamre Road and on to the Erskine Park Link Road, which provide connections to the M4 Western Motorway to the north, Elizabeth Drive at Kemps Creek in the south and the M7 Motorway to the east.

There are no natural surface water features within the landfill site or adjoining lots. A tributary of South Creek is located to the south and west of the site, flowing in a north-westerly direction and discharging in to South Creek around 1.5 km to the northwest of the landfill. The site forms an elevated position compared to the surrounding topography due to the landfilling operation, with runoff draining down the slopes of the landfill area and collecting in a drainage system at the perimeter of the Site. It is then collected and conveyed to two sediment basins, which, during an overflow event, discharge to the South Creek tributary via open channels.

Disturbance of the natural environment has occurred as a result of historic clearing and agricultural production activities, development and operation of a quarry and the subsequent development and operation of the existing landfill and associated activities. It is primarily devoid of vegetation as a result. There are no known threatened species, populations or communities or their habitats present on the subject site and none are likely to occur. There is also no identified heritage item or conservation area within the site.

# 2.3 Land Use Zonings

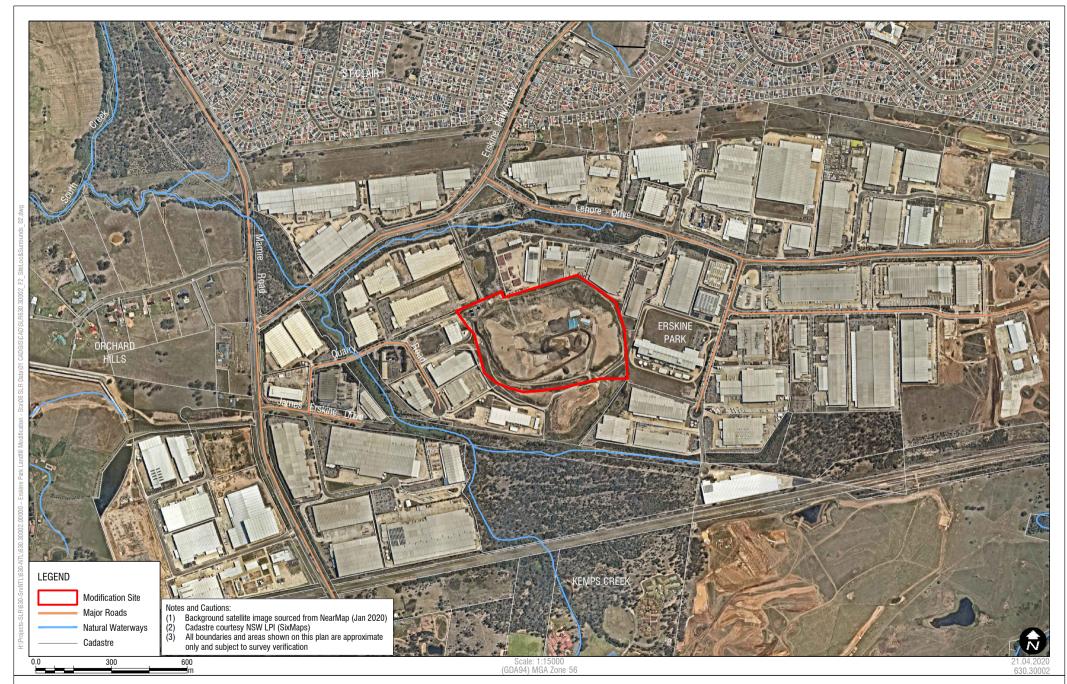
Zoning in the WSEA is administered under the *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP). As evident on **Figure 4**, the majority of the site is zoned E2 Environmental Conservation, with a small section in the north-west corner of Lot 4 DP 1094504 zoned IN1 General Industrial.







**REGIONAL LOCALITY** 







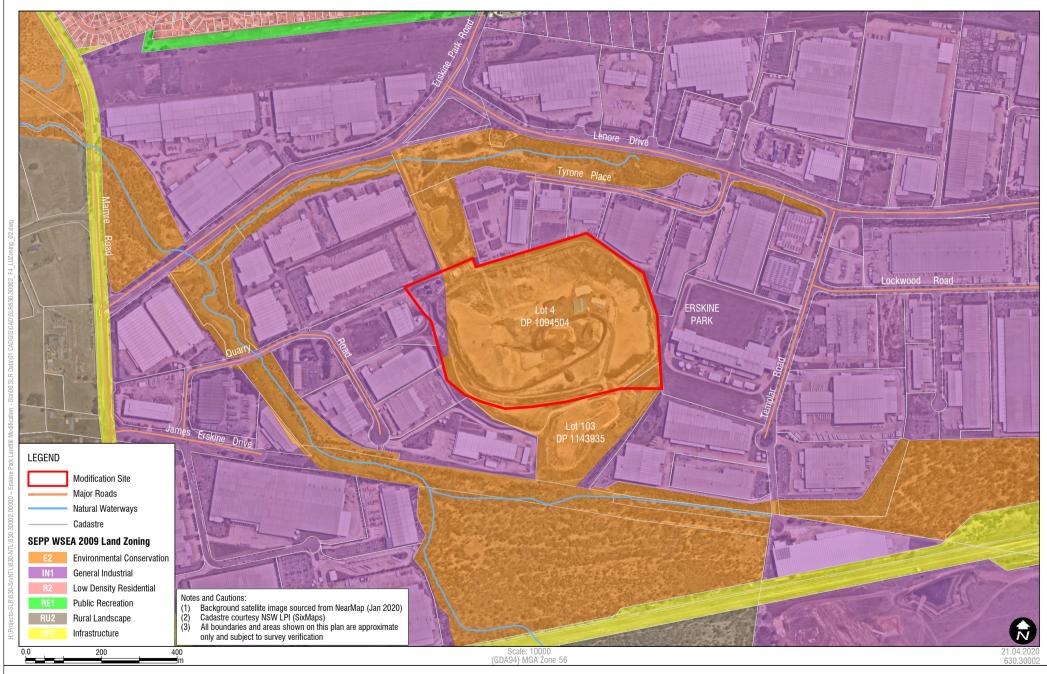
SITE LOCATION AND SURROUNDS





EME advisory

**MODIFICATION SITE** 







**LAND USE ZONINGS** 

# 2.4 Land Ownership

The registered owners of the land parcels within the area for the proposed modification are:

- Lot 4 DP 1094504 Enviroguard Pty Ltd; and
- Part Lot 103 DP 1143935 CSR Limited.

# 2.5 Surrounding Land Uses and Receptors

The Erskine Park Landfill commenced operations in 1994 in accordance with Development Consent DA 163/92 (see **Section 3.1**). Industrial development commenced in later years within the surrounding area and built up very close to the landfill site boundary. Today, the landfill sits within the Erskine Business Park, which is characterised by a range of industrial land uses, including warehousing, logistics and manufacturing operations. As evident on **Figures 2** and **3**, the site is largely surrounded and screened by established large-scale industrial buildings. There are some vegetated areas along the surrounding public road corridors and the drainage reserve to the south and west of the site, which are part of a biodiversity conservation corridor.

The nearest residential dwellings are located within the suburbs of St Clair and Erskine Park approximately 650 m to the north of the landfill, with other developed industrial land parcels and a transmission line corridor between these residences and the landfill. There are also some residences and a children's day care facility over 820 m to the west of the landfill on the western side of Mamre Road. Residential development is prohibited within the WSEA.

# 3 APPROVED DEVELOPMENT

# 3.1 Development Consent History

The below provides a summary of the development consents issued for the Erskine Park Landfill since the cessation of quarrying.

#### **Development Consent DA 163/92**

Development Consent DA 163/92 was issued by Council on 11 November 1992 under Part 4 of the EP&A Act permitting rehabilitation of a former quarry via the disposal of non-putrescible waste materials, along with site rehabilitation and cessation of landfilling.

#### **Development Consent DA 05/1740**

Council subsequently issued Development Consent DA 05/1740 on 25 May 2006 under Part 4 of the EP&A Act for on-going landfilling with non-putrescible waste (no change to landfilling rates), with the landfill to be filled in stages and site rehabilitation to a specific top-of-waste landform. The final landform was designed as a twin peak arrangement to 87 m Australian Height Datum (AHD) and 92 m AHD to reflect the original pre-quarrying landform. Following completion of landfilling the site is to be vegetated to form part of a biodiversity conservation corridor providing connectivity between ecological corridors to the north and south.

#### <u>Development Consent DA 05/1740.01 – Modification 1</u>

Council issued an approval under section 4.55(2) of the EP&A Act in August 2019 to modify Development Consent DA 05/1740 allowing the approved final landform to be altered from the two-peak arrangement to a single ridgeline at 92 m AHD. This enabled improved stormwater management and waste placement ability resulting in an additional landfill airspace of approximately 140,000 m³, which increased the lifespan of the landfill by around 9 months.

#### **Development Consent DA 10/0429**

Council issued Development Consent DA 10/0429 on 23 December 2010 under Part 4 of the EP&A Act permitting the capture of landfill gas for either flaring or off-site transfer, which provided significant safety and environmental benefits.

#### **Development Consent DA 11/063**

Council issued Development Consent DA 11/063 on 2 June 2011 under Part 4 of the EP&A Act for the construction and operation of a leachate treatment plant, which provided a treatment solution for landfill leachate during both the operational and post-closure periods.

#### **Development Consent DA 13/0655**

In July 2014, Council issued Development Consent DA 13/0655 to construct and operate a pipeline measuring 4.7 km from the landfill to a brick manufacturing plant owned and operated by the Austral Bricks in Horsley Park. As the pipeline route also extends across the adjoining Fairfield LGA, Fairfield City Council issued Development Consent 301.1/2013 in July 2014 for the section of pipeline within its LGA. The pipeline transfers the landfill gas to fire kilns at the brick manufacturing plant.

Further information on the landfill gas pipeline, being the subject of the proposed modification detailed in this SEE, is provided in **Section 3.3**, and a copy of Development Consent DA 13/0655 is contained in **Appendix B**.

#### 3.2 Environment Protection Licence

The Erskine Park Landfill operates under the provisions of Environment Protection Licence EPL 4865 administered by the Environment Protection Authority (EPA) under Chapter 3 of the *Protection of the Environment Operations Act 1997* (POEO Act). This licence, a copy of which is contained in **Appendix C**, covers the fee-based activity of "waste disposal by application to land" (any capacity).

#### 3.3 Approved Landfill Gas Pipeline

The supply of landfill gas from Erskine Park Landfill to the Austral Bricks facility, as approved under development consents DA 13/0655 (Penrith LGA) and DA 301.1/2013 (Fairfield LGA) (see **Section 3.1**), provides significant safety and environmental benefits associated with using the landfill gas as a substitute for conventional fuel to fire the brick kilns. It has been successfully operating, without incident, since late 2014.

The approved landfill gas pipeline is described in the document titled *Statement of Environmental Effects* for the Erskine Park Landfill Gas Project (R.W. Corkery & Co. 2013).

#### 3.3.1 Route

**Figure 5** shows the route of the approved 4.7 km pipeline between the landfill gas compression plant within Lot 4 DP 1094504 (i.e. Erskine Park Landfill) and the Austral Bricks facility in Horsely Park.

#### **Impact Route**

The pipeline traverses from the landfill gas compression plant adjacent to the western boundary of the site along with the western and southern edges of the landfill within Lot 4 DP 1094504 and then within an easement through Lot 103 DP 1143935.

#### No Change

The pipeline then follows an unformed Crown road reserve, which runs east-west to the south of the industrial area, and then turns south and running along the eastern boundary of Lot 6 DP 1124329, which is an area identified as a biodiversity corridor managed by the Department of Planning, Industry and Environment (DPIE). From there, the pipeline route turns east and follows WaterNSW land associated with the Warragamba Pipeline Corridor before passing through land owned by Austral Bricks and beneath Ropes Creek and an unnamed tributary of Ropes Creek. The route continues to Old Wallgrove Road to connect with Plant 23 at the Austral Bricks facility.

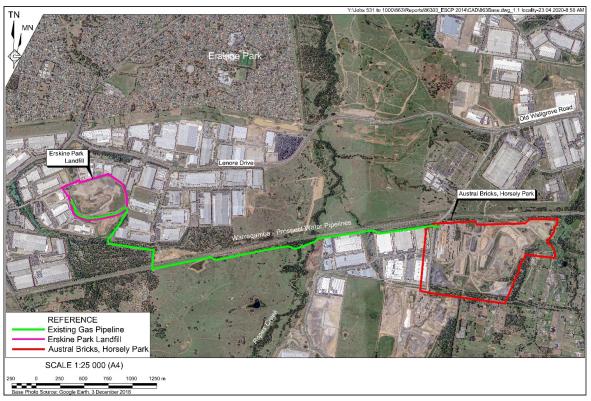
#### 3.3.2 Construction

The approved pipeline consists of a 315 millimetre (mm) diameter high density polyethylene (HDPE) pipe laid in either 6 m or 12 m lengths along the corridor. The pipeline is fitted with flame arrestors and isolation valves at each end, with a gas meter and calorimeter located at the entry end of the gas delivery line.

The pipeline was installed using a combination of trenching or underboring methods, depending on the area through which the pipeline corridor passed.

A landfill gas flare is also used to maintain gas extraction volumes to offset any disruption to Austral Bricks' gas intake.

Figure 5 Approved Gas Pipeline Route



Source: R.W. Corkery & Co.

# 4 PROPOSED MODIFICATION

#### 4.1 Overview

Enviroguard is seeking to modify Development Consent DA 13/0655 (see **Sections 3.1** and **3.3**) to allow relocation of part of the landfill gas pipeline. As outlined in **Section 1.3**, the relocation of the gas pipeline is required to accommodate the installation of the proposed MSE wall (subject to a separate application to Council – DA 20/0189) to extend the lifespan of the landfill. The wall would restrict access to the pipeline in its current location, with the proposed relocation providing for on-going access for maintenance and operation for gas supply to Austral Bricks.

#### 4.2 Route

As shown on **Figure 6**, the proposed relocation is limited to approximately 800 m of the gas pipeline contained within the landfill site itself, being Lot 4 DP 1094504, and a very short section within the adjoining Lot 103 DP 1143935 owned by CSR Limited. Both of these lots are part of Enviroguard's EPA licence to operate the landfill under EPL 4865. The remaining 3.9 km of the pipeline route connecting the landfill to Austral Bricks, including the entire section through the Fairfield LGA, will remain unchanged.

As evident, the relocated section of pipeline will traverse from the landfill gas compression plant adjacent to the western boundary of the site around the northern and eastern edges of the landfill within Lot 4 DP 1094504. It will then extend south in to the adjoining Lot 103 DP 1143935 within an existing easement for a very short distance before connecting in to the existing pipeline.

#### 4.3 Construction

The new piping will consist of 315 mm diameter HDPE pipe laid in either 6 m or 12 m lengths within the realigned corridor. The relocation of the pipeline will involve the following key steps:

- The flare will be manually started as the first step before any works commence on the gas pipeline;
- The gas pipeline will be isolated at the nearest tap downstream of the works area. The gas within
  the decommissioned length of the pipe will be vented in a controlled manner at the knock out pots
  located within the landfill site;
- The trench along the length of pipeline to the relocated will be opened and the pipe will be cut in to sections and removed for appropriate reuse or disposal off-site;
- New trenching will be excavated along the relocated route and the new piping will be installed and connected;
- The realigned gas pipeline will be tested and subsequently commissioned; and
- Disturbed areas will be rehabilitated.

It is anticipated that the relocated pipeline will be fully installed and ready to commission within 6 to 8 weeks. The landfill gas will be flared during this time.



Figure 6 Proposed Relocated Landfill Gas Pipeline

Source: R.W. Corkery & Co.

#### 4.3.1 Hours

All construction activities will be undertaken during standard daytime construction hours, which in accordance with the *Interim Construction Noise Guideline* (Department of Environment and Climate Change [DECC] 2009) (ICNG) are:

- Monday to Friday 7:00 am to 6:00 pm;
- Saturday 8:00 am to 1:00 pm; and
- No audible construction work on Sundays and public holidays.

If COVID-19 guidelines allow flexible construction hours during Saturdays, Sundays and public holidays, the construction hours for this project would reflect the same to ensure safe work practices.

#### 4.3.2 Access and Traffic

Access for vehicles, plant and equipment will be via the landfill's existing site access from Quarry Road via a shared access through the adjoining Lot 1 DP 1140063 (85-87 Quarry Road), which encompasses Cleanaway's Erskine Park Waste and Resource Management Facility.

Based on the type of construction activities involved, only a low volume of traffic is expected to be generated daily over the 6 to 8 week construction phase and there should not be any interaction issues with vehicles entering/exiting the landfill and neighbouring waste and resource management facility.

# 4.3.3 Equipment

The following equipment will be required on-site for construction activities associated with relocating the gas pipeline:

- Excavator;
- Service truck for delivery of pipes;
- One or two Franna cranes for lifting pipes;
- Pipe welding machines or equipment;
- Water truck; and
- Light vehicles.

#### 4.3.4 Workforce

It is anticipated that up to 10 construction workers will be engaged over all or part of the construction stage. Construction workers will be suitably inducted and all COVID-19 measures will be complied with.

# 4.3.5 Trenching and Pipe Installation

The new pipeline corridor will be excavated using trenching methods and the new piping will be installed as follows:

- 1. The alignment of the new pipeline corridor will be marked on the ground.
- 2. A trench measuring 1,400 mm deep by 500 mm wide will be excavated in sections, with all material placed to temporary stockpiles adjacent to the trench. The topsoil (top 150 mm) will be separately stockpiled for rehabilitation purposes.

- 3. Once each section of the trench is excavated, 100 mm of washed, pH neutral bedding sand will be laid along the base of the trench and the pipe will be laid on top of the sand.
- 4. Lengths of pipe will be butt-welded together at the surface and then lowered into the open trench.
- 5. The same bedding sand will be packed in and around the pipeline within the trench so there is approximately 100 mm of sand above the pipe.
- 6. The bulk of the stockpiled excavated materials will be backfilled into the trench and compacted, followed by approximately 150 mm of the stockpiled topsoil (no compaction).
- 7. The backfilled trench corridor will be seeded with a suitable pasture mix and fertilised.

Figure 7 illustrates a long-section and cross-section of a standard trenched section for the new pipeline.

A A Topsoil 50mm-150mm Section 315mm HDPE Pipe Laid in Backfilled Backfilled to 885mm 6m or 12m lengths and Existing Surface Compacted 1.4m 100mm Plan View Bedding Sand 315mm HDPE Pipe 100mm **Bedding Sand** Section

Figure 7 Pipeline Trenching

Source: R.W. Corkery & Co. 2020a

#### 4.3.6 Erosion and Sediment Control

Appropriate erosion and sediment control (ESC) measures will be installed in accordance with the Erosion and Sediment Control Plan (ESCP) prepared by R.W. Corkery & Co. (2020a) in **Appendix D**.

#### 4.3.7 Rehabilitation

Disturbed areas will be promptly rehabilitated to a stable landform following completion of construction activities. Where possible, topsoil will be re-spread to a depth of approximately 150 mm in the reverse sequence to its removal so that the organic layer containing any seed or vegetation is returned to the surface. The re-spread topsoil will be levelled to achieve an even surface (avoiding a compacted or an over-smooth finish). Re-vegetation will commence as soon as practicable, with a suitable pasture seed mix and fertiliser being spread over the disturbance area using a broadcast seeding method.

# 4.4 Testing and Commissioning

Prior to commissioning of the realigned pipeline to resume gas supply to Austral Bricks, the pipeline will be pressure tested to ensure there are no leaks in the system. Any issues found during the testing will be appropriate resolved prior to final commissioning.

Once re-commissioned, the pipeline will operate as per the approved operations under Development Consent DA 13/0655.

# 5 ASSESSMENT PATHWAY AND PLANNING CONSIDERATIONS

# 5.1 Assessment Pathway

As advised in **Section 3.1**, the section of the landfill gas pipeline within the Penrith LGA was granted Development Consent DA 13/0655 by Council in July 2014 under Part 4 of the EP&A Act. Enviroguard is now seeking to modify this consent under section 4.55(2) of the EP&A Act in order to allow relocation of part of the gas pipeline (as described in **Section 4**). The requirements of section 4.55(2) are listed in **Table 1**, with commentary provided as to how each requirement is addressed by the proposal.

Table 1 Section 4.55(2) Modification Requirements

	h City Council and Fairfield City Council issued the original
A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if -	opment consents for the pipeline as it extended across both However, the consent authority for the modification is the City Council given the proposed pipeline relocation is limited ection of the pipeline within the Penrith LGA. The applicant for the original Development Consent DA 55 was Austral Bricks Company Pty Ltd, the applicant for the sed modification is Enviroguard Pty Ltd (acting on behalf of al Bricks).
interp  the trace of the trace	rem "substantially the same development" has been reted by the NSW Land and Environment Court:  the meaning of "modify" is to alter without radical ransformation (Transport Action Group Against Motorway Inc.  Roads and Traffic Authority 1999); the term "substantially" means "essentially or materially having the same essence" (Moto Projects (No 2) Pty Ltd v North laydney Council 1999).  The ference point for substantially the same development is the state originally consented to under DA 13/0655. The approved state as originally consented to under DA 13/0655. The approved state as outlined in Section 3.3, includes:  Construction of a landfill gas pipeline between the Erskine Park and fill and the Austral Bricks facility at Horsley Park, a distance of 4.7 km; and peration of the gas pipeline to supply landfill gas to Austral ricks.  Toposal is substantially the same development as that ally consented to, namely a gas pipeline for the supply of all gas from Erskine Park Landfill to the Austral Bricks facility in lay Park. There is no change to the use or destination of the peline, the quantity of gas to be supplied, or overall gement and operations. The changes to the route of the ne relate to approximately 800 m of the overall 4.7 km route. The real to approximately 800 m of the overall 4.7 km route. The relate to approximately 800 m of the overall 4.7 km route. The relate to approximately 800 m of the overall 4.7 km route. The relate to the south owned by mited (both lots licensed under Enviroguard's EPL 4865). Invironmental impacts of the proposal are expected to be to negligible. If it wasn't for the requirement to refer the ation to the secondary approval authorities involved in the all development application, the proposal would have been

(b) it has consulted with the relevant Minister, public authority or approval body (within the meaning of Division 4.8) in respect of a condition imposed as a requirement of a concurrence to the consent or in accordance with the general terms of an approval proposed to be granted by the approval body and that Minister, authority or body has not, within 21 days after being consulted, objected to the modification of that consent, and	<ul> <li>The original development application (DA 13/0655) was considered "integrated development" and we understand was referred to the following agencies:</li> <li>Fairfield City Council – development consent required under Part 4 of the EP&amp;A Act given the pipeline also traverses the Fairfield LGA and section 138 approval required under the Roads Act 1993 for works within Old Wallgrove Road;</li> <li>NSW Office of Water (now WaterNSW and DPIE Water) – controlled activity approval required under the Water Management Act 2000 (WM Act) given the pipeline passes beneath two creeks;</li> <li>EPA;</li> <li>Roads and Traffic Authority (now Roads and Maritime Services); and</li> <li>Sydney Catchment Authority.</li> <li>An approval under section 138 of the Roads Act 1993 was also required from Penrith City Council for works within the Crown road reserve to the south the site.</li> <li>Given that the 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited, the only agency that the modification needs referring to is the EPA to assess any implication for EPL 4865 granted for operation of the landfill. The remaining 3.9 km of the pipeline, including the entire section through the Fairfield LGA, beneath the two creeks and under the road reserves, will remain unchanged.</li> </ul>
(c) it has notified the application in accordance with -  (i) the regulations, if the regulations so require, or  (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and  (d) it has considered any submissions	The modification application will be notified for a period of 28 days.
(d) It has considered any submissions made concerning the proposed modification within the period prescribed by the regulations or provided by the development control plan, as the case may be.	Submissions may be provided in response to the notification of the application.

In conclusion, a modification under section 4.55(2) of the EP&A Act appears to be a suitable and lawful consent pathway for the proposal to realign 800 m of the landfill gas pipeline within the landfill site itself and a short section within the adjoining lot owned by CSR Limited. This SEE demonstrates that the pipeline, as proposed to be modified, will be substantially the same development for which consent was originally granted by Council under DA 13/0655 and the associated environmental impacts are expected to be negligible or minor. The consent authority for the modification is Council, who we understand intend to refer the application to other relevant government agencies.

# Part 2 of Schedule 3 of the Environmental Planning and Assessment Regulation 2000

Part 2 of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* addresses whether alterations or additions to an approved development can be "designated development". Clause 35 states:

Development involving alterations or additions to development (whether existing or approved) is not designated development if, in the opinion of the consent authority, the alterations or additions do not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development.

There is no means by which the proposed relocation of 800 m of the gas pipeline could be considered "designated development". The works to carry out the relocation will be short-term (approximately 6 to 8 weeks) and limited to the landfill site itself and a short section in the adjoining privately-owned lot. The limited environmental impacts anticipated will be effectively managed via the standard environmental management practices already in place for the site.

# 5.2 Permissibility

The underlying use of the approved development, being a landfill gas pipeline, and the lots within which it is located, will not change as a result of the proposal. Therefore, the proposal is permissible as a modification to the existing development consent.

# 5.3 Key Legislation

#### 5.3.1 Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is administered by the Commonwealth Department of Agriculture, Water and the Environment and provides a legal framework to protect and manage nationally important flora, fauna, ecological communities, water resources and heritage places defined as matters of "national environmental significance" (MNES). An action that will have, or is likely to have, a significant impact on a MNES or a significant impact on the environment of Commonwealth land must be referred to the Commonwealth Minister for a decision on whether assessment and approval is required under the EPBC Act.

Significant disturbance of the natural environment within the proposed disturbance footprint has occurred as a result of historic clearing and agricultural production activities, development and operation of a quarry and the subsequent development and operation of the existing landfill and associated activities. It is primarily devoid of vegetation as a result. There are no known threatened species, populations or communities or their habitats present and none are likely to occur. There is also no identified heritage items or conservation areas within the site.

The modification will not have a significant impact on any MNES or on the environment of Commonwealth land and referral to the Minister is not necessary.

# 5.3.2 Environmental Planning and Assessment Act 1979

The EP&A Act is the principal piece of legislation overseeing the assessment and determination of development proposals in NSW. The objects of the Act generally seek to promote management and conservation of natural and artificial resources, while also permitting appropriate development to occur.

As advised and discussed in **Section 5.1**, Enviroguard is seeking to modify Development Consent DA 13/0655 under section 4.55(2) of the EP&A Act. The matters listed in section 4.15(1), as are of relevance to the modification, have been addressed within this SEE to enable consideration by Council during the assessment and determination of the application.

#### 5.3.3 Protection of the Environment Operations Act 1997

The POEO Act is administered by the EPA and establishes the State's environmental regulatory framework and includes licensing requirements for certain activities. The Erskine Park Landfill operates under the provisions of EPL 4865 (see **Appendix C**) administered by the EPA under section 43 of the POEO Act. It is understood that Council referred the original development application to the EPA and will likely also refer the proposed modification to assess any implication for EPL 4865 granted for operation of the landfill.

#### 5.3.4 Roads Act 1993

The objectives of the *Roads Act 1993* include regulating the carrying out of various activities on public roads. Section 138 of the Act requires consent to be obtained prior to disturbing or undertaking work in, on or over a public road.

Section 138 approvals were issued by Penrith and Fairfield councils for pipeline works under the unformed Crown road reserve and Old Wallgrove Road, respectively. Given that the 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited, the modification does not have any approval requirements under the *Roads Act 1993*. The remaining 3.9 km of the pipeline, including the sections under the road reserves, will remain unchanged.

#### 5.3.5 Water Management Act 2000

The WM Act aims to ensure that water resources are conserved and properly managed for sustainable use benefitting both present and future generations. A controlled activity approval was issued by the (the) NSW Office of Water under the WM Act for pipeline works under two creeks. Given that the 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited, the modification does not have any approval requirements under the WM Act. The remaining 3.9 km of the pipeline, including the sections under the two creeks, will remain unchanged.

#### **5.4** Environmental Planning Instruments

The below sub-sections address the environmental planning instruments (EPIs) relevant to the proposed modification.

#### 5.4.1 State Environmental Planning Policy (Western Sydney Employment Area) 2009

The WSEA SEPP is the principal statutory EPI applying to the site. It aims to promote economic development and the creation of employment in the WSEA by providing for development, including major warehousing, distribution, freight transport, industrial, high technology and research facilities.

As shown on **Figure 4**, the majority of the site is zoned E2 Environmental Conservation, with a small section in the north-west corner zoned IN1 General Industrial, under the WSEA SEPP. The objectives of the E2 zone are:

To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.

 To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

The proposed modification to relocate part of the existing landfill gas pipeline does not pose any conflicts with the E2 zone objectives. The 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited, with the realigned route already significantly disturbed by past and present land uses. The remaining 3.9 km of the pipeline will remain unchanged. The relocation works will be short-term (approximately 6 to 8 weeks) and the limited environmental impacts anticipated will be effectively managed via the standard environmental management practices already in place for the site.

Once the landfill ceases operation, it will be decommissioned and rehabilitated to a stable and safe end landform as part of the surrounding biodiversity conservation corridor.

The objectives of the IN1 zone are:

- To facilitate a wide range of employment-generating development including industrial, manufacturing, warehousing, storage and research uses and ancillary office space.
- To encourage employment opportunities along motorway corridors, including the M7 and M4.
- To minimise any adverse effect of industry on other land uses.
- To facilitate road network links to the M7 and M4 Motorways.
- To encourage a high standard of development that does not prejudice the sustainability of other enterprises or the environment.
- To provide for small-scale local services such as commercial, retail and community facilities (including child care facilities) that service or support the needs of employment-generating uses in the zone.

The proposal is consistent with the IN1 objectives as it supports the continuation of an employment-generating activity, being the Erskine Park Landfill, and is in an existing industrial area. The relocation of the gas pipeline is required to accommodate the installation of the proposed MSE wall at the landfill to extend its lifespan. Providing additional capacity enables the continued use of the existing development site and the existing approved landfill facility, as opposed to developing a new landfill site, which would be difficult to find in the Sydney region. Ongoing landfill capacity at Erskine Park will help to maintain competition in the Sydney dry landfill market, benefitting businesses and government who need to access landfill capacity at competitive rates.

#### **Development Standards**

Part 5 of the WSEA SEPP sets out principal development standards. The only standard considered relevant to the proposal to realign part of the landfill gas pipeline is "ecologically sustainable development", as addressed below.

#### 20 Ecologically Sustainable Development

The consent authority must not grant consent to development on land to which this Policy applies unless it is satisfied that the development contains measures designed to minimise: (a) the consumption of potable water, and (b) greenhouse gas emissions.

The proposal will not change the consumption of potable water on site. Additional landfill gas generated as a result of additional waste placement made possible by the proposed MSE wall will be captured and transferred to the Austral Bricks facility, via the realigned pipeline, where it is used as an alternative fuel to fire the kilns. As such, the safety and environmental benefits will continue.

# 5.4.2 State Environmental Planning Policy No. 55 - Remediation of Land

The State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) aims to provide a Statewide approach to the remediation of contaminated land. In accordance with EPL 4865 granted for operation of the landfill, on-going groundwater, surface water, landfill gas, dust and noise monitoring is undertaken at the site to assess potential impacts on and off site. Any event of exceedances to the trigger levels specified in the EPL (for groundwater, noise, dust, stormwater or landfill gas) recorded at nominated on-site locations are reported and managed appropriately by Enviroguard in consultation with EPA. The Preliminary Site Investigation (Golder Associates 2020) that accompanied the modification application to Council for the MSE wall at the landfill concluded that the site is suitable for on-going use as a waste facility and presents a low risk to off-set receptors.

The realignment of 800 m of the 4.7 km gas pipeline will not result in a more sensitive land use or a change of land use and, as such, further assessment in relation to potential contamination under SEPP 55 is not warranted in association with the proposed modification.

#### 5.4.3 Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River

The Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997) (SREP 20) aims to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context. The proposal is within the South Creek catchment of the Hawkesbury-Nepean River.

Part 3 of the SREP 20 contains specific controls for development related to primary production, residential land use, industry, water related uses, land filling, stormwater, waste management and works impacting on the river or areas of significance to the region. In relation to the proposed realignment of 800 m of the gas pipeline, appropriate ESC measures will be installed in accordance with the ESCP in **Appendix D**, disturbed areas will be promptly rehabilitated to a stable landform following completion of construction works, and it will not change or impact water management measures for the landfill. As such, the proposal will not adversely impact on the hydrology or water quality of the South Creek catchment and is consistent with the requirements of SREP 20.

# 5.5 Penrith Development Control Plan 2014

Part E6 of the *Penrith Development Control Plan 2014* (DCP) applies specifically to the Erskine Business Park, in which the site is located. The DCP has limited applicability to the proposed modification seeking to realign 800 m of an existing gas pipeline. The proposal appears compatible with the intent of the DCP, along with the objectives and relevant environmental quality controls for the Erskine Business Park precinct. The works to carry out the realignment will be short-term (approximately 6 to 8 weeks) and limited to the landfill site itself and a short section in an adjoining lot. The limited environmental impacts anticipated will be effectively managed via the standard environmental management practices already in place for the site.

Refer to **Section 6** for information in relation to the key environmental considerations.

# **6** IMPACT ASSESSMENT

This section addresses the potential environmental impacts associated with the proposal to relocate part of the existing landfill gas pipeline and nominates the measures that will be implemented by Enviroguard to mitigate and manage the potential impacts.

The 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited, with the realigned route already significantly disturbed by past and present land uses. The remaining 3.9 km of the pipeline will remain unchanged. The relocation works will be short-term (approximately 6 to 8 weeks) and the limited environmental impacts anticipated will be effectively managed via the standard environmental management practices already in place for the site.

#### 6.1 Soil and Water

The 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot to the south, well removed from any waterways. The remaining 3.9 km of the pipeline, including the sections beneath the two creeks, will remain unchanged.

The primary mechanisms for the proposal to pose an impact to soil and water resources are through erosion and sedimentation and spill incidents associated with re-fuelling vehicles and equipment. It is noted that an existing on-site mobile diesel refuelling truck or a third party refuelling contractor will be utilised and, therefore, the risk is low.

In relation to groundwater, the relocated pipeline will be installed in a relatively shallow trench approximately 1,400 mm deep. As such, there will not be any interaction with groundwater.

Given that the construction works will be limited to existing disturbed land, changes to the existing runoff/recharge regime will be negligible.

#### **Mitigation and Management**

- Appropriate ESC measures will be installed in accordance with the ESCP prepared by R.W. Corkery
   & Co. (2020a) in Appendix D.
- ESC measures will be inspected and maintained on a regular basis and after rainfall events to ensure
  they remain in effective working order throughout the construction process until the site has been
  stabilised.
- Disturbed areas will be promptly rehabilitated and revegetated to a stable landform following completion of the construction works.
- Any fuel spills or leakages will be reported to the Site Manager and the actions specified on the respective Safety Data Sheets (SDS) will be implemented without delay.

# 6.2 Noise

Existing background noise in the vicinity of the site would be typical of an industrial environment with noise emissions from heavy vehicle traffic and equipment associated with the landfill operation and neighbouring facilities, including Cleanaway's Erskine Park Waste and Resource Management Facility, and traffic on the surrounding public roads.

The ICNG (DECC 2009) recommends a qualitative method of construction noise assessment to simplify the identification of potential impacts for short-term works. While a drilling machine won't be needed, for conservatism, R.W. Corkery & Co. (2020b) adopted a drilling machine with a sound power level of approximately 109 dB(A) (decibels with "A" weighting scale used to describe human response to noise) as the loudest item of machinery during the construction phase for the pipeline relocation. For the purposes of this assessment and consistent with the works for the existing pipeline, a maximum sound power level of the combined equipment will be 112 dB(A) (R.W. Corkery & Co. 2020b)

Using conservative point-to-point calculations accounting for noise attenuation for distance only, R.W. Corkery & Co (2020b) advises that the maximum noise level at the closest residence (~615 m north of the closest point of works for the new section of pipeline) will be approximately 48 dB(A). At the Emmaus Residential Aged Care facility, which is a sensitive receiver approximately 825 m south of the closest point of works for removal of the existing section of pipeline, the maximum predicted noise level is less than 46 dB(A). These levels are significantly lower than the 75 dB(A) maximum noise level specified in the ICNG (DECC 2009). Notably, the predicted noise levels are approximately 10 to 12 dB(A) lower than those previously assessed and approved for the original development application (which involved works in closer proximity to receivers).

In conclusion, the predicted noise levels associated with the short duration of works associated with the relocation of pipeline are expected to remain acceptable.

# **Mitigation and Management**

- Construction works will be undertaken within the standard daytime construction hours specified in the ICNG (DECC 2009) (see Section 4.3.1). If COVID-19 guidelines allow flexible construction hours during Saturdays, Sundays and public holidays, the construction hours for this project would reflect the same to ensure safe work practices.
- Mobile equipment will be fitted with broadband reversing alarms (as opposed to conventional tonal
- Plant and equipment operators will be appropriately instructed on how to minimise noise generation at all times.
- Plant and equipment will be regularly maintained to meet regulatory/industry standards and ensure optimal operating condition

#### 6.3 Traffic

Access for vehicles, plant and equipment will be via the landfill's existing access from Quarry Road via a shared access through the adjoining Lot 1 DP 1140063 (85-87 Quarry Road), which encompasses Cleanaway's Erskine Park Waste and Resource Management Facility.

Based on the type of construction activities involved, only a low volume of traffic is expected to be generated daily over the 6 to 8 week timeframe and there should not be any interaction issues with vehicles entering/exiting the landfill and waste and resource management facility. There will be no noticeable impact on the safety or operation of the public road network.

#### **Mitigation and Management**

- Suitable signage will be erected indicating internal construction traffic direction and speed limits to ensure the orderly and safe use of the site, as well as to minimise the potential for traffic conflict.
- Vehicles will not exceed a general speed limit of 10 km/hour within the site and will be confined, where possible, to the existing internal access roads.

• Internal roads will be maintained clear of obstruction and used exclusively for the purposes of transport, loading-unloading and parking.

# 6.4 Air Quality

Existing background air quality in the vicinity of the site would be typical of an industrial environment with particulate matter emissions from landfilling activities, including heavy vehicle traffic and equipment, and traffic on the surrounding public roads.

As determined for the original development application, the localised extent of construction works and the short duration of activities (approximately 6 to 8 weeks) will not generate any notable additional dust and the potential impacts will be negligible.

# **Mitigation and Management**

- Active construction areas, trafficable areas and stockpiles will be "wetted down" as necessary during dry conditions.
- Plant and equipment will be regularly maintained to meet regulatory/industry standards and ensure optimal operating condition.
- Vehicles will not exceed a general speed limit of 10 km/hour within the site and will be confined, where possible, to the existing internal access roads.
- Disturbed areas will be promptly rehabilitated and revegetated to a stable landform.

# 6.5 Waste Management

Waste materials have the potential to adversely impact on public safety and the environment if not appropriately managed. Potential wastes to be generated during the construction works, along with their respective classifications under the *Waste Classification Guidelines* (EPA 2014) and intended reuse/recycling/disposal, are listed in **Table 2**.

**Table 2** Construction Waste Management

Waste Types	NSW Classification	Reuse / Recycling / Disposal
Conduits and pipes	General solid (non-putrescible)	Off-site recycling
Sediment fencing, geotextile materials	General solid (non-putrescible)	Off-site reuse or disposal at licensed facility
Sand / soil	General solid (non-putrescible)	Reused on-site
General domestic waste generated by construction workers	Mix of general solid (non- putrescible) Mix of general solid (putrescible)	Disposal at landfill (non-putrescible) Disposed at the transfer station within the adjoining Lot 1 DP 1140063 (putrescible)

# 6.6 Visual Amenity

Given the separation distances and intervening buildings and surrounds, there should not be any notable visual impact issues over the short 6 to 8 week construction stage.

Once the pipeline is installed and disturbed areas rehabilitated, there will not be any on-going visual amenity impacts. The relocated pipeline will be buried and there will not be any changes to the gas compression plant or flare.

# 6.7 **Biodiversity**

The 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited, with the realigned route already significantly disturbed by past and present land uses. It is primarily devoid of vegetation as a result. There are no known threatened species, populations or communities or their habitats present and none are likely to occur. The remaining 3.9 km of the pipeline will remain unchanged.

On this basis, there will not be any impacts to local biodiversity.

# 6.8 Heritage

The 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited, with the realigned route already significantly disturbed by past and present land uses. There are no identified heritage items or conservation areas within the site. The remaining 3.9 km of the pipeline will remain unchanged.

On this basis, there will not be any impacts to Aboriginal cultural heritage, historic heritage or environmental heritage.

# 6.9 Existing Infrastructure

The 800 m length of realigned pipeline will be contained within the landfill site itself and a short section in the adjoining lot owned by CSR Limited. The remaining 3.9 km of the pipeline will remain unchanged.

The relocation of the gas pipeline is required to accommodate the installation of the proposed MSE wall (see **Section 1.3**). The wall would restrict access to the pipeline in its current location, with the proposed relocation providing for on-going access for maintenance and operation for gas supply to Austral Bricks.

There will not be any interaction issues with other existing infrastructure.

#### 6.10 Landfill Gas Combustion

The combustion of the landfill gas will continue to be undertaken in accordance with the Australian Gas Association requirements.

# 7 CONCLUSION

This SEE has been prepared to accompany an application by Enviroguard seeking to modify Development Consent DA 13/0655 under section 4.55(2) of the EP&A Act to relocate part of the landfill gas pipeline to make way for additional airspace works at the Erskine Park Landfill (subject to a separate application). The relocation is limited to approximately 800 m of the pipeline contained within the landfill site itself and one adjoining land parcel owned by CSR Limited. The remaining 3.9 km of the pipeline route connecting the landfill to Austral Bricks, including the entire section through the Fairfield LGA, will remain unchanged.

The proposal has been assessed in this SEE in accordance with the context of the relevant environmental legislation and planning instruments, including the EP&A Act and WSEA SEPP, and concludes the following:

- The gas pipeline, as proposed to be modified, will be substantially the same development for which consent was originally granted;
- The associated environmental impacts are expected to be negligible or minor; and
- A modification under section 4.55(2) of the EP&A Act appears to be a suitable and lawful consent pathway for the proposal.

Envirogaurd will implement the environmental mitigation and management practices listed in **Section 6**, in addition to the standard management practices already in place at the landfill, to effectively mitigate and manage the very limited environmental risks.

The relocation of the gas pipeline is required to accommodate the installation of the proposed MSE wall (subject to a separate application to Council - DA 20/0189) to provide additional landfill airspace and extend the life of the landfill by around 3 years. The wall would restrict access to the gas pipeline in its current location, with the proposed relocation providing for on-going access for maintenance and operation for gas supply to Austral Bricks.

Providing additional capacity at the existing landfill site enables the continued use of the existing development site and the existing approved landfill facility, as opposed to developing a new landfill site, which would be difficult to find in the Sydney region. Ongoing landfill capacity at Erskine Park will help to maintain competition in the Sydney dry landfill market, benefitting businesses and government who need to access landfill capacity at competitive rates.

# 8 REFERENCES

Department of Environment and Climate Change (2009) Interim Construction Noise Guideline

Golder Associates (2020) Preliminary Site Investigation, Erskine Park Landfill

R.W. Corkery & Co. Pty Limited (2013) Statement of Environmental Effects for the Erskine Park Landfill Gas Project

R.W. Corkery & Co. Pty Limited (2020a) *Erskine Park Waste Management Facility Gas Pipeline Relocation, Erosion and Sediment Control Plan* 

R.W. Corkery & Co. Pty Limited (2020b) Qualitative noise assessment input for SEE

# 9 ABBREVIATIONS

AHD Australian Height Datum

Austral Bricks Austral Bricks Company Pty Ltd

Cleanaway Waste Management Pty Ltd

Council Penrith City Council

DCP Penrith Development Control Plan 2014

DP Deposited Plan

DPIE Department of Planning, Industry and Environment

EME EME Advisory

Enviroguard Pty Ltd

EPA Environment Protection Authority

EPBC Act Environment Protection and Biodiversity Conservation Act 1999

EPI environmental planning instrument
EPL Environment Protection Licence

EP&A Act Environmental Planning and Assessment Act 1979

ESC erosion and sediment control

ESCP Erosion and Sediment Control Plan

HDPE high density polyethylene

ICNG Interim Construction Noise Guideline

km kilometre

LGA local government area

m metre

mm millimetres m³ cubic metres

MNES matters of national environmental significance

MSE mechanically stabilised earth

NSW New South Wales

POEO Act Protection of the Environment Operations Act 1997

SEE Statement of Environmental Effects
SEPP State Environmental Planning Policy

SEPP 55 State Environmental Planning Policy No. 55 – Remediation of Land

SREP 20 Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 – 1997)

WM Act Water Management Act 2000

WSEA SEPP State Environmental Planning Policy (Western Sydney Employment Area) 2009

**Appendix A** 

**Pre-DA Meeting Notes (Ref PL 19/0096)** 

Document Set ID: 9124412 Version: 1, Version Date: 05/05/2020



Our Ref: PL19/0096

Contact: Development Services Administration

Telephone: (02) 4732 7991

15 January 2020

B Cullinane 17 Carlotta Street GREENWICH NSW 2065

Dear Mr Cullinane

Pre-lodgement Advice
Proposed Development Construction of a12m Mechanically Stabilized
Earth (MSE) Wall along the Western and Southern Landfill Perimeter at
Erskine Park Land Fill
Lot 4 DP 1094504, Address Lot 4 Off Quarry Road ERSKINE PARK
NSW 2759

Thank you for taking part in Council's pre-lodgement meeting on 14 January 2020. The meeting was useful for Council in gaining an understanding of your proposal.

You are advised that should the items in the attached information be addressed, your application should be suitable for submission and consideration.

Information given by the pre-lodgement panel does not constitute a formal assessment of your proposal and at no time should comments of the officers be taken as a guarantee of approval of your proposal.

If we can help you any further regarding the attached advice, please feel free to contact the Development Services Administration Team on (02) 4732 7991.

Yours sincerely

Gemma Bennett
Senior Development Assessment Planner

Penrith City Council PO Box 60, Penrith NSW 2751 Australia T 4732 7777 F 4732 7958 penrithcity.nsw.gov.au



# PRE-LODGEMENT ADVICE

Proposal Construction of a12m Mechanically Stabilized Earth (MSE) Wall

along the Western and Southern Landfill Perimeter at Erskine Park

Land Fill

**Address** Lot 4 DP 1094504

Lot 4 Off Quarry Road ERSKINE PARK NSW 2759

#### **Attendees**

# **Proponent**

Brian Cullinane - EME Advisory

Paul Anthony - Cleanaway

# **Penrith City Council**

Gemma Bennett - Senior Development Assessment Planner

Stephen Masters - Senior Development Engineer

Carlie Fulton - Senior Environmental Health Officer

Lauren Forrest-Martin - Administration Officer

Jayden O'Brien - Business Administration Trainee

**Zoning:** E2 Environmental Conservation, IN1 General Industrial

**Development Type:** Integrated, Regional

The pre-lodgement panel will endeavour to provide information which will enable you to identify issues that must be addressed in any application. The onus remains on the applicant to ensure that all relevant controls and issues are considered prior to the submission of an application.

# **RELEVANT EPIS POLICIES AND GUIDELINES**

- State Environmental Planning Policy No 33 Hazardous and Offensive Development
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy (Western Sydney Employment Area) 2009
- State Environmental Planning Policy. No 55 Remediation of Land
- Sydney Regional Environmental Plan no 20 Hawkesbury Nepean River (no 2 1997)
- Penrith Local Environmental Plan 2010
- Penrith Development Control Plan 2014 (Part E6 Erskine Business Park)
- Protection of the Environment Operations Act 1997

#### **KEY ISSUES AND OUTCOMES**

The proposal is to address the following issues:

#### **PLANNING:**

- Schedule 7 (5) of SEPP (State and Regional Development) 2011 specifies that private infrastructure and community facilities with a capital investment value over \$5 million, including waste or resource management facilities, is regionally significant development. Regionally significant development is determined by the Sydney Western City Planning Panel. Panel meeting are held monthly at the Council offices and the panel reporting lead-in times should be factored into time frames for estimated determination of the proposal.
- As the proposal is integrated development the notification and advertising period is 28 days.
- Based on the plans and description of the proposal presented at the prelodgement, Council can be satisfied that the development proposed is
  substantially the same as that originally approved under DA05/1740, and
  therefore the proposal may be submitted as a modification under Section
  4.55(2) of the Environmental Planning and Assessment Act 1979.
- It is likely that the proposal can satisfy the factors for consideration under Part 2, Schedule 3 of the Environmental Planning and Assessment Regulation 2000, and therefore not trigger the designated development provisions. The documents and reports submitted with the modification application must fully demonstrate that there is no additional environmental impact as a result of the proposed development.
- All documents associated with the consents DA05/1740 and 163/92 should be reviewed and amended where required to ensure they remain consistent and appropriate with regards to the modifications proposed. These include, but are not limited to:
  - Landscape Plan (DA05/1740 condition 4)
  - Site Rehabilitation and Environmental Management Plan (DA05/1740 condition 6)
  - Vegetation Management Plan and Soil and Water Management Plan (DA05/1740 condition 8)
  - Landfill Environmental Management Plan (DA05/1740 condition 9)
- A visual impact assessment should be submitted with the application.
- As discussed in the meeting, if the wall is to be constructed in stages, the
  modification application should fully detail the stages proposed and expected
  timeline for completion of each stage.
- With regards to the relocation of the gas pipeline associated with DA13/0655, as the development was integrated and fairly complex in relation to concurrences and referrals (EPA, RMS, Office of Water and Sydney Catchment Authority) that a separate modification application be pursued.

#### **ENVIRONMENTAL MANAGEMENT:**

# **Integrated Development**

The landfill is subject to a current Environment Protection Licence, as the waste management activities are considered a scheduled activity under the Protection of the Environment Operations Act. In turn, any application will need to be referred to the EPA for comment and General Terms of Approval. Council encourages early discussions with the EPA to determine whether they require any further information or whether they have concerns about the proposed development. Further, the EPA may have more specific requirements to those outlined below.

# **Environmental Management**

- The application will need to address the noise and air quality (dust / odour) impacts of the development. It is noted that the documentation provided advises that there will be no additional environmental impacts to noise, dust and groundwater. Whilst existing environmental management practices may be appropriate, given the changes to the landform and in turn where works will be occurring, and the construction program involved, suitably qualified consultants will need to confirm that the measures can effectively manage all potential impacts.
- The documentation acknowledges that changes will need to be made to gas collection, leachate management and stormwater management systems.
   Details of these changes will need to be provided with the application.

#### SEPP 55 - Remediation of Land

The application is to address all relevant requirements under SEPP 55.
 Council cannot consent to any development unless these requirements have been satisfied. The application is to demonstrate that the land is suitable for the proposed purpose.

## SEPP 33 - Hazardous and Offensive Development

 Consider the Department of Planning's 'Applying SEPP 33' Guidelines and address the risk screening to determine whether a Preliminary Hazard Analysis is required. If required, a Preliminary Hazard Analysis should be prepared in accordance with the guidelines and submitted with the DA. Consider inputs and outputs, what stored on site, and other activities occurring on the site and nearby.

#### **ENGINEERING:**

#### General

- Council's engineering requirements for subdivisions and developments, including policies and specifications listed herein, can be located on Council's website at the following link:
  - https://www.penrithcity.nsw.gov.au/Building-and-Development/Development-Applications/Engineering-requirements-for-developments/
- All engineering works must be designed and constructed in accordance with Council's Design Guidelines for Engineering Works for Subdivisions and Developments and Council's Engineering Construction Specification for Civil Works.

#### Stormwater

- Stormwater drainage for the site must be in accordance with the following:
  - Council's Development Control Plan,
  - Stormwater Drainage Specification for Building Developments policy, and
  - Water Sensitive Urban Design Policy and Technical Guidelines.
- A stormwater concept plan, accompanied by a supporting report and calculations, shall be submitted with the application

#### Traffic

 The application shall be supported by a traffic assessment undertaken within the Statement of Environmental Effects addressing, but not limited to construction traffic management such as truck movements, truck numbers, expected duration of construction etc.

# **Earthworks**

- The mechanically stabilised earth wall is to be designed by a suitably qualified structural engineer. Concept plans are only required for DA lodgement.
- No retaining walls or filling is permitted for this development which will impede, divert or concentrate stormwater runoff passing through the site.
- Earthworks and retaining walls must comply with Council's Development Control Plan.

# **Documentation to be submitted with Development Application**

- Survey Drawing
- Site Plan
- Statement of Environmental Effects
- · Elevation and Section Plans
- Construction Traffic Management Plan (in SoEE)
- Operational Plan of Management
- Stormwater Concept Plan
- · Contamination Assessment
- Structural Engineering Concept Plans
- Visual Impact Assessment

Please refer to Council's Development Application checklist, as attached, for further details of submission requirements and ensure that plans submitted illustrate consistent detail.

Please ensure you contact Council's duty officer on 4732 7991 to make an appointment for lodgement of this application.

#### **Fees**

Please call the Development Services Administration on (02) 4732 7991 to enquire about fees and charges.

**Appendix B** 

**Development Consent DA 13/0655** 

Document Set ID: 9124412 Version: 1, Version Date: 05/05/2020



# NOTICE OF DETERMINATION

# **DESCRIPTION OF DEVELOPMENT**

Application number:	DA13/0655	
Description of development:	Buried Landfill Gas Pipeline	
Classification of development:	N/A	

# DETAILS OF THE LAND TO BE DEVELOPED

Legal description:	Lot 11 DP 1178389
	Lot 103 DP 1143935
	Lot 6 DP 1124329
	Lot 10 DP 229784
	Lot 12 DP 229784
	Lot B DP 154739
	Lot 1 DP 84578
	Lot 4 DP 1094504
Property address:	Quarry Road, ERSKINE PARK NSW 2759
	0 Sarah Andrews Close, ERSKINE PARK NSW 2759
	650 e Mamre Road, KEMPS CREEK NSW 2178
	2 - 18 Aldington Road, KEMPS CREEK NSW 2178
	Quarry Road, ERSKINE PARK NSW 2759

# **DETAILS OF THE APPLICANT**

Name & Address:	The Austral Brick Company Pty Ltd
	PO Box 6550
	WETHERILL PARK NSW 1851

# **DECISION OF CONSENT AUTHORITY**

In accordance with Section 81(1) (a) of the Environmental Planning and Assessment Act 1979, consent is granted subject to the conditions listed in attachment 1.

Please note that this consent will lapse on the expiry date unless the development has commenced in that time.

Date from which consent operates

18 July 2014

Penrith City Council - Notice of Determination

Page 1 of 11

Date the consent expires	18 July 2016
Date of this decision	15 July 2014

# POINT OF CONTACT

If you have any questions regarding to	his determination you should contact:
Assessing Officer:	Pukar Pradhan
Contact telephone number:	(02) 4732 7726

# **NOTES**

#### Reasons

The conditions in the attached schedule have been imposed in accordance with Section 80A of the Environmental Planning and Assessment Act 1979 as amended.

#### **Conditions**

Your attention is drawn to the attached conditions of consent in attachment 1.

#### Certification and advisory notes

You should also check if this type of development requires a construction certificate in addition to this development consent

It is recommended that you read any Advisory Note enclosed with this notice of determination.

#### Review of determination

The applicant may request Council to review its determination pursuant to Section 82A of the Environmental Planning and Assessment Act 1979 within 6 months of receiving this Notice of Determination.

You cannot make this request if the development is Designated Development, Integrated Development or State Significant development or if the application was decided by a Joint Regional Planning Panel.

#### Appeals in the Land and Environment Court

The applicant can appeal against this decision in the Land and Environment Court within six (6) months of receiving this Notice of Determination.

You cannot appeal if a Commission of Inquiry was held for the subject development application, or if the development is a State Significant Development.

An appeal to the Land and Environment Court is made by lodging an application to the Court in accordance with the Rules of the Court.

# Designated development

If the application was for designated development and a written objection was made in respect to the application, the objector can appeal against this decision to the Land and Environment Court within 28 days after the date of this notice. The objector cannot appeal if a Commission of Inquiry was held.

If the applicant appeals against this decision, objector(s) will be given a notice of the appeal and the objector(s) can apply to the Land and Environment Court within 28 days after the date of this appeal notice to attend the appeal and make submissions at that appeal.

#### Joint Regional Planning Panels

If the application was decided by a Joint Regional Planning Panel, please refer to Section 23H of the Environmental Planning and Assessment Act, 1979 (as amended) for any further regulations.

# **OTHER APPROVALS**

# APPROVAL BODIES(Delete this section if not applicable)

APPROVAL BODY NAME	DATE OF GENERAL TERMS OF APPROVAL	REF. NO.	NO. OF PAGES	RELEVANT LEGISLATION
NSW EPA	11- Nov - 2014	1517961	4	Protection of the Environment Operation Act 1997
NSW Office of Water	30 July 2014	10ERM2013/0559	3	Water Management Act 2000

The approval bodies listed above have provided General Terms of Approval for this development in accordance with the relevant legislation. A copy of these General Terms of Approval is provided with this development consent notice. Compliance with the relevant State Government departments' General Terms of Approval are required in conjunction with the following conditions listed in Attachment 1: Conditions of Consent issued by Penrith City Council.

# **CONCURRENCE AUTHORITIES**(Delete this section if not applicable)

CONCURRENCE AUTHORITY	DATE OF CONCURRENCE	REF. NO.	NO. OF PAGES	RELEVANT LEGISLATION
Sydney Catchment Authroity	22/08/2013	D2013/65821	2	Sydney Catchment Management Act 1998
Roads & Maritime Services	5 August 2013	SYD13/00793	1	Roads Act 1993

# ATTACHMENT 1: CONDITIONS OF CONSENT

## General

- 1 The development must be implemented substantially in accordance with the plans and commitments contained in the Statement of Environmental Effectsfor the Erskine Park Landfill Gas Project prepared by R.W. CORKERY & CO. PTY. LIMITED and dated June 2013.
- 2 The proponent shall comply with the General Terms of Approval (GTAs) of the Department of Primary Industries and the Environment Protection Authority. The GTAs are attached at the end of this development consent.
- 3 Mud and soil from vehicular movements to and from the site must not be deposited on the road.
- 4 Dust suppression techniques are to be employed during all earth works or/and demolition to reduce any potential nuisances to surrounding properties.
- 5 Adjustments to any public utilities necessitated by the development are to be completed in accordance with the requirements of the relevant Authority. Any utility costs are to be at no cost to Council.
- 6 All trenches shall be backfilled and compacted to a minimum 100% standard compaction. Compaction Certificate shall be submitted to Council on completion of the works.
- There is to be no construction equipment, trucks, etc. to be parked at the end of Quarry Road's cul-de-sac so that there is no inconvenience caused to the traffic movement within the Quarry Road cul-de-sac area.
- 8 The Proponent shall:
  - a) ensure that the Works do not damage the Sydney Catchment Authority's water supply infrastructure or reduce the safety of the operation of the infrastructure; and
  - b) repair, or pay all reasonable costs associated with repairing Sydney Catchment Authority infrastructure that is damaged by the project;.
  - The gas pipeline shall be encased or installed within a lining for the section where it crosses the land owned by the Sydney Catchment Authority.
  - Where the gas pipeline crosses the land owned by the Sydney Catchment Authority, the alignment of the gas pipeline shall be at least 5 metres from any support structure for the Warragamba to Prospect Pipelines.
  - Entry onto the Warragamba to Prospect Pipelines corridor shall not be undertaken without access consent from the Sydney Catchment Authority.
  - All incidents or near misses that have the potential to impact on the Warragamba Prospect Pipelines shall be reported to the Sydney Catchment Authority (SCA) on the SCA's Incident Notification Number 1800 061 069 (24 hour service) as a matter of urgency.
  - If any of the fencing along the Sydney Catchment Authority's (SCA) Warragamba to Prospect Pipelines corridor is damaged or requires replacement, or upgrading, then this shall be done to the SCA's requirements and with all reasonable costs met by the proponent.
  - The Sydney Catchment Authority (SCA) requires the proponent of any new structures proposing to cross SCA lands to establish an easement or enter into a licence

Penrith City Council - Notice of Determination

agreement with SCA.

9 The development must be carried out in accordance with Environment Protection Licence 4865 issued by the Environment Protection Authority. Should this licence be revoked, suspended or surrendered, an application is to be submitted to Council for consideration of matters contained in the licence.

# Heritage/Archaeological relics

10 If any archaeological relics are uncovered during the course of the work no further work shall be undertaken until further directed by Penrith City Council or the NSW Heritage Office.

The applicant is advised that depending on the possible significance of the relics, an archaeological assessment and an excavation permit under the Heritage Act, 1977 may be required before any further work can be recommenced in that area of the site.

## **Environmental Matters**

11 Erosion and sediment control measures shall be installed **prior to the commencement of works on site** including approved clearing of site vegetation. The erosion and sediment control measures are to be maintained in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

(Note: To obtain a copy of the publication, you should contact Landcom on (02) 98418600).

The approved sediment and erosion control measures are to be installed **prior to and maintained throughout the construction phase of the development until [the landscaping, and the land, that was subject to the works, have been stabilised and grass cover established.** These measures shall ensure that mud and soil from vehicular movements to and from the site does not occur during the construction of the development.

Penrith City Council - Notice of Determination

- 12 No fill material shall be imported to the site until such time as a Validation Certificate(with a copy of any report forming the basis for the validation) for the fill material has been submitted to, considered and approved by Council. The Validation Certificate shall:
  - state the legal property description of the fill material source site,
  - be prepared by an appropriately qualified person (as defined in Penrith Contaminated Land Development Control Plan) with consideration of all relevant guidelines (e.g. EPA, ANZECC, NH&MRC), standards, planning instruments and legislation,
  - clearly indicate the legal property description of the fill material source site,
  - provide details of the volume of fill material to be used in the filling operations,
  - provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
  - (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment

{Note: Penrith Contaminated Land Development Control Plan defines an appropriately qualified person as "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance."}.

If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances the works shall be carried out prior to any further approved works.

- 13 All waste materials stored on-site are to be contained within a designated area such as a waste bay or bin to ensure that no waste materials are allowed to enter the stormwater system or neighbouring properties. The designated waste storage areas shall provide at least two waste bays / bins so as to allow for the separation of wastes, and are to be fully enclosed when the site is unattended.
- 14 All excavated material and other wastes generated as a result of the development are to be re-used, recycled or disposed of in accordance with the approved waste management plan.

Waste materials not specified in the approved waste management plan are to be disposed of at a lawful waste management facility. Where the disposal location or waste materials have not been identified in the waste management plan, details shall be provided to the Certifying Authority as part of the waste management documentation accompanying the Construction Certificate application.

All receipts and supporting documentation must be retained in order to verify lawful disposal of materials and are to be made available to Penrith City Council on request.

Page 8 of 11

## **BCA** Issues

15 An easement shall be created on all lots subject to this application that enables the construction of the pipeline as well as ensuring its long term maintenance. The easement shall be created and registered on the various titles prior to commencement of construction of the proposed gas pipelines. A documentary evidence of lodgement of easements with with Land and Property Information division of the Department of Lands shall be provided to Council prior to the commencement of any construction works of gas pipeline. A documentary evidence from with Land and Property Information division of the Department of Lands to demonstrate that easements have been created and registered shall be submitted to Council over the subject lands prior to gas pipeline becoming operational.

#### Construction

16 Stamped plans, specifications, a copy of the development consent, the Construction Certificate and any other Certificates to be relied upon shall be available on site at all times during construction.

The following details are to be displayed in a maximum of 2 signs to be erected on the site:

- the name of the Principal Certifying Authority, their address and telephone number,
- the name of the person in charge of the work site and telephone number at which that person may be contacted during work hours,
- that unauthorised entry to the work site is prohibited,
- the designated waste storage area must be covered when the site is unattended, and
- all sediment and erosion control measures shall be fully maintained until completion of the construction phase.

Signage but no more than 2 signs stating the above details is to be erected:

- at the commencement of, and for the full length of the, construction works onsite, and
- in a prominent position on the work site and in a manner that can be easily read by pedestrian traffic.

All construction signage is to be removed when the Occupation Certificate has been issued for the development.

- 17 Prior to the commencement of construction works:
  - (a) Toilet facilities at or in the vicinity of the work site shall be provided at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided must be:
  - a standard flushing toilet connected to a public sewer, or
  - if that is not practicable, an accredited sewage management facility approved by the council, or
  - alternatively, any other sewage management facility approved by council.
  - (b) All excavations and backfilling associated with the gas pipeline must be executed safely and in accordance with the appropriate professional standards. All excavations associated with the gas pipeline must be properly quarded and protected to prevent them from being dangerous to life or property.
  - (c) If an excavation associated with the gas pipeline extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:
  - · must preserve and protect the building from damage, and
  - if necessary, must underpin and support the building in an approved manner, and
  - must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished. The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land, (includes a public road and any other public place).
  - (d) If the work involved in the gas pipeline work is likely to cause pedestrian or vehicular traffic in a public place to be obstructed orrendered inconvenient, or involves the enclosure of a public place, ahoarding or fence must be erected between the work site and the public place:
  - any such hoarding, fence or awning is to be removed when the work has been completed.
- 18 Construction works or subdivision works that are carried out in accordance withan approved consent that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:
  - Mondays to Fridays, 7am to 6pm
  - Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm
  - No work is permitted on Sundays and Public Holidays.

Other construction works carried out inside a building/tenancy and do not involve the use of equipment that emits noise are not restricted to the construction hours stated above.

The provisions of the Protection of the Environment Operations Act, 1997 inregulating offensive noise also apply to all construction works.

# Landscaping

19 No trees are to be removed, ringbarked, cut, topped or lopped or wilfully destroyed (other than those within the proposed building footprint or as shown on the approved plans) without the prior consent of Penrith City Council and in accordance with Council's Tree Preservation Order and Policy.

# Certification

20 Prior to the commissioning of the pipeline, the applicant is to provide a suitable certification/documentary evidence prepared by a qualified person to Council indicating that all associated works with respect to gas pipeline have been carried out in accordance with the engineering plans and specification and in accordance with the development consent and the relevant provisions of the Environmental Planning and Assessment Act and accompanying Regulation.

The Principal Certifying Authority shall submit to Council an "Appointment of Principal Certifying Authority" in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

## Information to accompany the Notice of Commencement

Two (2) days before any earthworks or construction/demolition works are to commence on site (including the clearing site vegetation), the proponent shall submit a "Notice of Commencement" to Council in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

# **SIGNATURE**

Name:	$\wedge$	Pukar Pradhan
Signature:	Rocha	
For the Developm	ent Services Manager	



- 1 AUS HIB The General Manager SEMBLISH OUT Y COLUMNIE Contact: Nicole Hely Phone: 02 8838 7546 Fax: 02 8838 7554

Email: nicole.hely@water.nsw.gov.au
Out ref: 10 ERM2013/0559

Your ref: DA2013/0655

Penrith City Council PO Box 60 Penrith NSW 2751

Attention: Pukar Pradhan

30 July 2013

Dear Sir/Madam

Re: Integrated Development Referral – General Terms of Approval

FI-CHIVED

Dev Ref: DA2013/0655

Description of proposed activity: Installation and use of gas pipeline between the

Erskine Park waste facility and Horsley Park

Site location: 50 Quarry Road Lot 103 off Quarry Road Lot 6 off Sarah Andrews Close & 648B Mamre Road 650-652 Mamre Road, Erskine Park & 2-18 Aldington

Road, Kemps Creek

I refer to your recent letter regarding an integrated Development Application (DA) proposed for the subject property. Attached, please find the Office of Water's General Terms of Approval (GTA) for works requiring a controlled activity approval under the Water Management Act 2000 (WM Act), as detailed in the subject DA.

Please note Council's statutory obligations under section 91A (3) of the Environmental Planning and Assessment Act 1979 (EPA Act) which requires a consent, granted by a consent authority, to be consistent with the general terms of any approval proposed to be granted by the approval body.

If the proposed development is approved by Council, the Office of Water requests that these GTA be included (in their entirety) in Council's development consent. Please also note the following:

- The Office of Water should be notified if any plans or documents are amended and these amendments significantly change the proposed development or result in additional works on waterfront land (which includes (i) the bed of any river together with any land within 40 metres inland of the highest bank of the river, or (ii) the bed of any lake, together with any land within 40 metres of the shore of the lake, or (iii) the bed of any estuary, together with any land within 40 metres inland of the mean high water mark of the estuary).
- Once notified, the Office of Water will ascertain if the amended plans require review or variation/s to the GTA. This requirement applies even if the proposed works are part of Council's proposed consent conditions and do not appear in the original documentation.

www.water.nsw.gov.au

Macquarle Tower, 10 Valentine Avenue, Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124 Australia | t + 61 2 8281 7777 | f + 61 2 883 87554 l e information@water.nsw.gov.au | ABN 72 189 919 072

- The Office of Water should be notified if Council receives an application to modify the development consent and the modifications change any activities on waterfront land.
- The Office of Water requests notification of any legal challenge to the consent.

As the controlled activity to be carried out on waterfront land cannot commence before the applicant applies for and obtains a controlled activity approval, the Office of Water recommends the following condition be included in the development consent:

"The Construction Certificate will not be issued over any part of the site requiring a controlled activity approval until a copy of the approval has been provided to Council".

The attached GTA are not the controlled activity approval. The applicant must apply (to the Office of Water) for a controlled activity approval after consent has been issued by Council and before the commencement of any work or activity on waterfront land.

Finalisation of a controlled activity approval can take up to eight (8) weeks from the date the Office of Water receives all documentation (to its satisfaction). Applicants must complete and submit (to the undersigned) an application form for a controlled activity approval together with any required plans, documents, the appropriate fee and security deposit or bank guarantee (if required by the Office or Water) and proof of Council's development consent.

Application forms for the controlled activity approval are available from the undersigned or from the Office of Water's website:

www.water.nsw.gov.au

Water licensing > Approvals > Controlled activities

The Office of Water requests that Council provide a copy of this letter to the applicant.

The Office of Water also requests that Council provides the Office of Water with a copy of the determination for this development application as required under section 91A (6) of the EPA Act.

Yours Sincerely

Nicole Hely

Cadet Water Regulation Officer

Office of Water - Water Regulatory Operations Sydney

# **General Terms of Approval**

for work requiring a controlled activity approval under s91 of the Water Management Act 2000

Our Reference:

10 ERM2013/0559

Site Address:

50 Quarry Road Lot 103 off Quarry Road Lot 6 off Sarah Andrews Close & 648B Mamre Road 650-652 Mamre Road Erskine Park & 2-

18 Aldington Road Kemps Creek

**DA Number:** 

DA2013/0655

LGA:

Penrith City Council

Managhan	Londistan					
Number	Condition					
Plans, sta	ndards and guidelines					
These General Terms of Approval (GTA) only apply to the controlled activities described in and associated documentation relating to DA2012/286.1 and provided by Council:						
	Any amendments or modifications to the proposed controlled activities may render these GTA invalid. If the proposed controlled activities are amended or modified the NSW Office of Water must be notified to determine if any variations to these GTA will be required.					
2	Prior to the commencement of any controlled activity (works) on waterfront land, the consent holder must obtain a Controlled Activity Approval (CAA) under the Water Management Act from the NSW Office of Water. Waterfront land for the purposes of this DA is land and material in or within 40 metres of the top of the bank or shore of the river identified.					
3	The consent holder must prepare or commission the preparation of:					
	(i) Erosion and Sediment Control Plan					
4	All plans must be prepared by a suitably qualified person and submitted to the NSW Office of Water for approval prior to any controlled activity commencing. The following plans must be prepared in accordance with the NSW Office of Water's guidelines located at www.water.nsw.gov.au/Water-Licensing/Approvals/default.aspx					
	(i) Laying pipes and cables in watercourses					
5	The consent holder must (i) carry out any controlled activity in accordance with approved plans and (ii) construct and/or implement any controlled activity by or under the direct supervision of a suitably qualified professional and (iii) when required, provide a certificate of completion to the NSW Office of Water.					
6	The consent holder must reinstate waterfront land affected by the carrying out of any controlled activity in accordance with a plan or design approved by the NSW Office of Water.					
7	The consent holder must use a suitably qualified person to monitor the progress, completion, performance of works, rehabilitation and maintenance and report to the NSW Office of Water as required.					
8.	The consent holder must ensure that any excavation does not result in (i) diversion of any river (ii) bed or bank instability or (iii) damage to native vegetation within the area where a controlled activity has been authorised, other than in accordance with a plan approved by the NSW Office of Water.					

www.water.nsw.gov.au

Macquarie Tower, 10 Valentine Avenue, Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124 Australia | t + 61 2 8281 7777 170912

Document Set ID: 9124412 Version: 1, Version Date: 05/05/2020

# 'General Terms of Approval - Issued



Notice No: 1517961

PENRITH CITY COUNCIL

Penrith City Council

PO Box 60

PENRITH NSW 2751

Attention: Mr Pradhan Pukar

Notice Number

1517961

File Number

EF13/4740

Date

11-Nov-2013

Re: RE: Referral of Integrated Development Application for buried landfill gas pipeline - DA13/0655 at Lot 4 DP1094504, Lot 103 DP 1143935. Lot 6 DP 1124329, Lot 10 DP 229784, Lot 12 DP 229784, Lot B DP 154739, Lot 1 DP84578 & Lot 11 DP1178389 50 A Quarry Road, Lot 103 off Quarry Rd, Lot 6 off Sara Andrews Close, 648b Mamre Rd, 648a Mamre Rd & 650a Mamre Rd, ERSKINE PARK NSW 2759

## Issued pursuant to Section 91A(2) Environmental Planning and Assessment Act 1979

I refer to the above development application ("the application") and accompanying information provided by Penrith City Council ("Council") for the above proposed development to the Environment Protection Authority ("EPA"). The EPA received the application from Council on 22 July 2013 and was asked to provided comments in relation to the Erskine Park Waste Management Facility which is operated by Transpacific Pty Ltd ("the Licensee") and operates under Environment Protection Licence 4865 ("the Licence")

On 1 August 2013 the EPA requested that Council provide the EPA with any public submissions it had received in relation to the Application. On 14 October 2013 Council provided the EPA with one public submission.

EPA has reviewed the information provided and has determined that the proposed works are covered by existing conditions of the Licence.

The general terms of approval for this proposal are provided at Attachment A. If Council grants development consent for this proposal these conditions should be incorporated into the consent.

These general terms relate to the development as proposed in the documents and information currently provided to EPA. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to

# **General Terms of Approval - Issued**



Notice No: 1517961

consult with EPA about the changes before the consent is issued. This will enable EPA to determine whether its general terms need to be modified in light of the changes.

If you have any questions or wish to discuss the matter further, please contact Ms Lara Barrington 9995 5713.

Yours sincerely

Belinda Lake

Acting Unit Head

Waste & Resources - Waste Management

(by Delegation)

# 'General Terms of Approval - Issued



Notice No. 1517961

# Administrative conditions

Note: Mandatory conditions for all general terms of approval

# A1. Information supplied to the EPA

A1.1 Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- the development application DA13/0655 submitted to Penrith City Council on 2 July 2013;
- the document titled "Australbricks The Austral Brick Company ABN: 52000 005550 Statement of Environmental Effects for the Horsley Park Landfill Gas Project dated May 2012 prepared by R. W. Corkery & Co Pty Limited relating to the relating to the development; and
- all additional documents supplied to the EPA in relation to the development, including a public submission made to Council by Burak Dincel, General Manage of Gaonor Pty Ltd.

Limit conditions

#### L1. Pollution of waters

L.1.1 Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.

#### L6. Noise limits

The licensee must comply with the noise limits specified on the Environment Protection Licence No 4865.

# Operating conditions

#### 01. Odour

Note: Section 129 of the POEO Act provides that the licensee must not cause or permit the emission of any offensive odour from particular the premises unless potentially offensive odours have been identified in the licence and the odours are emitted in accordance with conditions specifically directed at minimising the odours are permitted.

# O2. Dust

**O2.1** Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.

O2.2 Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

# **General Terms of Approval - Issued**



Notice No: 1517961

## 03. Stormwater/sediment control - Construction Phase

O3.1 An Erosion and Sediment Control Plan (ESCP) must be prepared and implemented. The plan must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The ESCP should be prepared in accordance with the requirements for such plans outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing).

O3.2 All erosion and sediment controls must be in place prior to any construction/earthworks being undertaken.

O3.3 All erosion and sediment controls must be maintained and in serviceable condition at all times.

O3.4 After each rain event the sediment controls must be inspected and repaired if required.

O6.1 Waste water utilisation areas must effectively utilise the waste water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste water application may be required by the EPA.

# M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in conditions M1.2 and M1.3.

M1.2 All records required to be kept by the licence must be:

in a legible form, or in a form that can readily be reduced to a legible form;

kept for at least 4 years after the monitoring or event to which they relate took place, and

produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken;

the time(s) at which the sample was collected;

the point at which the sample was taken; and

the name of the person who collected the sample.

## Reporting conditions

R1.1 The applicant must provide an annual return to the EPA in relation to the development as required by any licence under the Protection of the Environment Operations Act 1997 in relation to the development. In the return the applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load-based fee calculation worksheets with the return.

# 'General Terms of Approval - Issued



Notice No: 1517961

14 NOV 2013

PENRITH CITY COUNCIL

Penrith City Council

PO Box 60

PENRITH NSW 2751

Attention: Mr Pradhan Pukar

Notice Number

1517961

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Date

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On 1 August 2013 the EPA requested that Council provide the EPA with any public submissions it had received in relation to the Application. On 14 October 2013 Council provided the EPA with one public submission.

EPA has reviewed the information provided and has determined that the proposed works are covered by existing conditions of the Licence.

The general terms of approval for this proposal are provided at Attachment A. If Council grants development consent for this proposal these conditions should be incorporated into the consent.

These general terms relate to the development as proposed in the documents and information currently provided to EPA. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to

# **General Terms of Approval - Issued**



Notice No: 1517961

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Yours sincerely

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Waste & Resources - Waste Management

(by Delegation)

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Notice No: 1517961

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# **General Terms of Approval - Issued**



Notice No: 1517961

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Fairfield City Council, Administration Centre, 86 Avoca Road, Wakeley 2176 Tel: (O2) 9725 O222 Fax: (O2) 9725 4249 ABN: 83 140 439 239 All communications to:

Fairfield City Council, PO Box 21, Fairfield NSW 1860 Email address: mail@fairfieldcity.nsw.gov.au

3 July 2014

**ENQUIRIES:** Mr K Berzins on 9725 0846

Austral Brick Company Pty Ltd PO Box 6550 WETHERILL PARK DC NSW 1851

Dear Sir/Madam,

# NOTICE OF DETERMINATION OF **DEVELOPMENT APPLICATION NO. 301.1/2013**

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

You are advised that the subject application has been APPROVED pursuant to Section 80 of the Environmental Planning and Assessment Act, 1979 and is subject to the following conditions.

Property Description:

Lot 1 DP 843901, Lot 21 DP 1173181, No. 224-398

Burley Road, Horsley Park

Description of Development:

Construction and operation of a Gas Pipeline in association with brick manufacture on Lot 1, DP 843901.

1 July 2014

Date of Determination: Date of Operation of Consent: 1 July 2014

Date Consent Will Lapse:

1 July 2019

## APPROVED PLANS

#### 1. **Compliance with Plans**

The development shall take place in accordance with the approved Statement of Environmental Effects for the Erskine Park Landfill Gas Project as prepared by R.W. Corkery & Co. Pty Ltd, dated May 2013, except as modified in red by Council and/or any conditions of this consent.

# PRIOR TO THE COMMENCEMENT OF ANY WORKS

The following conditions of consent have been imposed to ensure that the administration and amenities relating to the proposed development comply with all relevant requirements. A Certifying Authority can either be Fairfield City Council or an accredited certifier. All of these conditions are to be complied with prior to the commencement of any works on site.

#### 2. **Notify Council of Intention to Commence Works**

The applicant must notify Council, in writing of the intention to commence works at least two (2) days prior to the commencement of any construction works on site.

## 3. Erosion and Sedimentation Control

Prior to the commencement of any construction works on site, controls in accordance with Chapter 3.11 of the Fairfield City Wide DCP 2013 shall be implemented prior to clearing of any site vegetation, to ensure the maintenance of the environment and to contain soil erosion and sediment on the property. Erosion and sediment controls shall be maintained until all construction works are completed and all disturbed areas are restored by turfing, paving and revegetation.

The documented erosion and sediment control plan shall be available on-site for inspection by Council Officers and all contractors undertaking works on the site.

**Note:** On the spot penalties up to \$1,500 will be issued for any non-compliance with this requirement without any further notification or warning.

# 4. Required Signage

For building, subdivision or demolition work that will affect the external walls of the building, signage shall be installed in a prominent position detailing:

- The name, address and telephone number of the principal certifying authority for the work, and
- The name of the principal contractor (if any) of the building work and a telephone number on which that person may be contacted outside working hours, and
- Stating that unauthorised entry to the work site is prohibited.

This sign shall be maintained while the building, subdivision or demolition work is being carried out and must be removed when the work has been completed.

# PRIOR TO OCCUPATION OF THE DEVELOPMENT

The following conditions of consent must be complied with prior to the issue of an Interim Occupation Certificate or Final Occupation Certificate by the Principal Certifying Authority.

# 5. Adjustments to Public Utilities

Adjustments to any public utilities necessitated by the development are to be completed in accordance with the requirements of the relevant Authority. Any utility costs are to be at no cost to Council.

## **GENERAL CONDITIONS**

The following conditions have been applied to ensure that the use of the land and/or building is carried out in such a manner that is consistent with the aims and objectives of the planning instrument affecting the land. A Principal Certifying Authority can either be Fairfield City Council or an accredited certifier.

# 6. Environmental Protection Authority Approval

The attached Environmental Protection Authority's General Terms of Approval shall be complied with at all times.

**NB**: The EPA General Terms of Approval <u>DO NOT</u> constitute a license under the Protection of the Environment Operations (POEO) Act 1997. The applicant is required to obtain a license from the DECC for the approved development pursuant to the POEO Act 1997, prior to the commencement of any construction works, or any works or processes associated with the proposed development.

# 7. NSW Office of Water Approval

The attached NSW Office of Water General Terms of Approval shall be complied with at all times.

**NB**: The NSW Office of Water General Terms of approval <u>DO NOT</u> constitute a Part 3A Permit under the Rivers and Foreshores Improvement Act (1984). To obtain a Part 3A Permit, the developer will need to lodge a separate application with the NSW Office of Water. A Part 3A Permit shall be obtained prior to the issue of a Construction Certificate.

## 8. Future Road Works

In the event that a regional road is constructed over the pipeline in the Vicinity of Old Wallgrove Road, all costs associated with works required to make the pipeline 'safe' shall be borne by Austral Bricks Pty Ltd as confirmed in their letter dated 27 June 2014.

## 9. Easements

Prior to the gas pipeline becoming operational, evidence shall be provided to Council that easements have been created over the subject land enabling access and maintenance works on the gas pipeline in perpetuity.

# 10. Compaction of Trench

The trenching shall be backfilled and compacted to a minimum 100% standard compaction. Compaction Certificates shall be submitted to Council on completion of the works.

# 11. Road Opening Permit

A Road Opening Permit shall be obtained from Council prior to commencement of any works.

# 12. Public Liability Insurance during Construction

Prior to the commencement of any works on the footpath, the applicant must submit to Council a copy of a current Public Liability Insurance Policy with a minimum cover of \$20 million relating to all aspects of the works to be carried out on the footpath. The Policy must note the Council as an interested party.

# 13. Section 94A Levy Development Contributions

Prior to the issue of the Road Opening Permit, a receipt for the payment to Fairfield City Council of Section 94A Levy Contributions shall be submitted to the Certifying Authority.

The Section 94A Levy as determined at the date of this consent is \$2085.00.

The contribution amount payable may be adjusted at the date of payment. Any unpaid contributions will be adjusted on a quarterly basis to account for movements in the Australian Bureau of Statistics, Producer Price Index – Building Construction (New South Wales).

# **ADVISORY NOTES**

The following information is provided for your assistance to ensure compliance with other relevant Council policy(s) and any other relevant requirements. A Principal Certifying Authority can either be Fairfield City Council or an accredited certifier.

## Covenants which may Affect this Proposal

The land upon which the subject building is to be constructed may be affected by restrictive covenants. Council issues this approval without enquiry as to whether any restrictive covenant affecting the land would be breached by the construction of the building, the subject of this permit. Persons to whom this permit is issued must rely on their own enquiries as to whether or not the building breaches any such covenant.

# **HOW LONG DOES THIS APPROVAL LAST?**

Pursuant to Section 95 of the Environmental Planning and Assessment Act, 1979 physical commencement of construction works/use of the land, building or work is required within a five (5) year period from the issue of the date of consent after which time the approval will lapse.

# WHAT RIGHTS OF REVIEW EXIST?

Pursuant to Section 82A of the Environmental Planning and Assessment Act, 1979 an applicant who is dissatisfied with the determination with respect to the matters relating to the EP & A Act, may within six (6) months from the date of determination, request Council, in writing, to review the determination.

## WHAT APPEAL RIGHTS EXIST?

Pursuant to Section 97 of the Environmental Planning and Assessment Act, 1979 an applicant may seek a Right of Appeal to the Land and Environment Court within six (6) months from the date of consent if they are dissatisfied with the determination by the consent authority.

**GEORGE VLAMIS** 

MANAGER DEVELOPMENT PLANNING



Contact: Mohammed Ismail Phone: 02 8838 7535

Fax: 02 9895 7501 Email:

mohammed.ismail@water.nsw.gov.au

Our ref: 10 ERM2013/0475

Our file:

Your ref: DA2012/286.1

The General Manager Fairfield City Council PO Box 21 FAIRFIELD NSW 1860

FAIRFIELD CITY COUNCIL

3 1 JUL 2013

Attention: Mark Stephenson

a-Vlamis 12/03221 DOC ID: A661581 CRM 6-8-13

30 July 2013

Dear Mark

Integrated Development Referral - General Terms of Approval Re:

Dev Ref: DA2012/286.1

Description of proposed activity: Installation of Gas Pipeline and use of captured

landfill gas in the brick manufacturing process

Site location: 780 Wallgrove Road Horsley Park & 716 Wallgrove Road Horsley

Park

I refer to your recent letter regarding an integrated Development Application (DA) proposed for the subject property. Attached, please find the Office of Water's General Terms of Approval (GTA) for works requiring a controlled activity approval under the Water Management Act 2000 (WM Act), as detailed in the subject DA.

Please note Council's statutory obligations under section 91A (3) of the Environmental Planning and Assessment Act 1979 (EPA Act) which requires a consent, granted by a consent authority, to be consistent with the general terms of any approval proposed to be granted by the approval body.

If the proposed development is approved by Council, the Office of Water requests that these GTA be included (in their entirety) in Council's development consent. Please also note the following:

- The Office of Water should be notified if any plans or documents are amended and these amendments significantly change the proposed development or result in additional works on waterfront land (which includes (i) the bed of any river together with any land within 40 metres inland of the highest bank of the river, or (ii) the bed of any lake, together with any land within 40 metres of the shore of the lake, or (iii) the bed of any estuary, together with any land within 40 metres inland of the mean high water mark of the estuary).
- Once notified, the Office of Water will ascertain if the amended plans require review or variation/s to the GTA. This requirement applies even if the proposed works are part of Council's proposed consent conditions and do not appear in the original documentation.

# **General Terms of Approval**

for work requiring a controlled activity approval under s91 of the Water Management Act 2000

**Our Reference:** 

10 ERM2013/0475

Site Address:

780 Wallgrove Road Horsley Park & 716 Wallgrove Road Horsley

Parl

**DA Number:** 

DA2012/286.1

LGA:

Fairfield City Council

Plans, standards and guidelines				
1	These General Terms of Approval (GTA) only apply to the controlled activities described in the plans and associated documentation relating to DA2012/286.1 and provided by Council:			
	Any amendments or modifications to the proposed controlled activities may render these GTA invalid. If the proposed controlled activities are amended or modified the NSW Office of Water must be notified to determine if any variations to these GTA will be required.			
2	Prior to the commencement of any controlled activity (works) on waterfront land, the consent holder must obtain a Controlled Activity Approval (CAA) under the Water Management Act from the NSW Office of Water. Waterfront land for the purposes of this DA is land and material in or within 40 metres of the top of the bank or shore of the river identified.			
3	The consent holder must prepare or commission the preparation of:			
	(i) Erosion and Sediment Control Plan			
4	All plans must be prepared by a suitably qualified person and submitted to the NSW Office of Water for approval prior to any controlled activity commencing. The following plans must be prepared in accordance with the NSW Office of Water's guidelines located at www.water.nsw.gov.au/Water-Licensing/Approvals/default.aspx			
	(i) Laying pipes and cables in watercourses			
5	The consent holder must (i) carry out any controlled activity in accordance with approved plans and (ii) construct and/or implement any controlled activity by or under the direct supervision of a suitably qualified professional and (iii) when required, provide a certificate of completion to the NSW Office of Water.			
6	The consent holder must reinstate waterfront land affected by the carrying out of any controlled activity in accordance with a plan or design approved by the NSW Office of Water.			
7	The consent holder must use a suitably qualified person to monitor the progress, completion, performance of works, rehabilitation and maintenance and report to the NSW Office of Water as required.			
8.	The consent holder must ensure that any excavation does not result in (i) diversion of any river (ii) bed or bank instability or (iii) damage to native vegetation within the area where a controlled activity has been authorised, other than in accordance with a plan approved by the NSW Office of Water.			
END OF CO	ONDITIONS			

www.water.nsw.gov.au

Macquarie Tower, 10 Valentine Avenue, Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124 Australia | t + 61 2 8281 7777 | f + 61 2 883 87554 | l e information@water.nsw.gov.au | ABN 72 189 919 072 170912

Document Set ID: 9124412 Version: 1, Version Date: 05/05/2020

# **General Terms of Approval -**Issued



FAIRFIELD CITY COUNCIL

- 2 AUG 2013

TO:

FILE

Notice No: 1515648

Mr M Stephenson

Senior Development Planner

Fairfield City Council

PO Box 21

FAIRFIELD NSW 1860

Attention: Mr M Stephenson

Notice Number

1515648

File Number

LIC08/648-03

Lot 8 DP 1059698, 716 Wallgrove Road, Horsley Park NSW

Date

26-Jul-2013

Re: Development Application No. 286.1/2012, Proposed Installation of a Gas Pipeline and Use of Landfill Gas in the Brick Manufacturing Process at Lot 7 DP1059698, 780 Wallgrove Road and

ENTERES

I refer to the above development application and accompanying information provided for the above proposed development received by the Environment Protection Authority (EPA) on 30 May 2013.

The EPA has reviewed the information provided and has determined that it is able to vary the existing Environment Protection Licence No. 546 to incorporate the proposal, subject to a number of conditions. If consent is granted the licensee will need to apply to the EPA for a licence variation to incorporate the conditions of consent on the licence.

The general terms of approval for this proposal are provided at Attachment A. If Fairfield City Council grants development consent for this proposal these conditions should be incorporated into the consent.

These general terms relate to the development as proposed in the documents and information currently provided to EPA. In the event that the development is modified either by the applicant prior to the granting of consent or as a result of the conditions proposed to be attached to the consent, it will be necessary to consult with EPA about the changes before the consent is issued. This will enable EPA to determine whether its general terms need to be modified in light of the changes.



# General Terms of Approval - Issued



Notice No: 1515648

## Attachment A

# Administrative conditions

# A1. Information supplied to the EPA

A1.1 Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- the development application DA N. 286.1/2012 submitted to Fairfield City Council on 16 May 2013;and
- the Statement of Environmental Effects titled "The Austral Brick Company Pty Limited Statement of Environmental
  Effects for the Erskine Park Landfill Gas Project date May 2013" and supporting documentation relating to the
  development.

#### Limit conditions

## L1. Pollution of waters

**L.1.1** Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.

## L2. Concentration limits

**L2.1** The proponent (the licensee) must comply with air concentration limits specified on their Environment Protection License No.546 for license discharge Point 7 serving kiln No 7 located in Plant No. 3 when landfill gas is being used to fire the kiln.

#### L6. Noise limits

**L6.1** For the development the licensee must comply with the noise limits specified on Environment Protection Licence No. 546

# Operating conditions

## 01. Odour

Note: The POEO Act states that no offensive odour may be emitted from particular premises unless potentially offensive odours are identified in the licence and the odours are emitted in accordance with conditions specifically directed at minimising the odours are permitted. Where it is appropriate for a licence to identify and control offensive odours, conditions for the licence should be developed in consultation with Air Policy.

# O2. Dust

**O2.1** Activities occurring at the premises and during the construction of the landfill gas pie line must be carried out in a manner that will minimise emissions of dust from the premises.

# **General Terms of Approval - Issued**



Notice No: 1515648

# Discharge Point 7 as specified on Environment Protection Licence No. 546

Pollutant	utant Units of measure		Sampling Method
Cadmium	mg/m3	Special Frequency 1	TM-12,TM-13, and TM-14
Dry gas density	kg/m3	Special Frequency 1	TM-23
Fluorine or any compound containing fluorine, as total fluoride (hydrogen fluoride equivalent.	mg/m3	Special Frequency 1	TM-9
Hydrogen chloride	mg/m3	Special Frequency 1	TM-8
Hydrogen sulfide	mg/m3	Special Frequency 1	TM-5
Mercury	mg/m3	Special Frequency 1	TM-12, TM-13 and TM-14
Moisture	%	Special Frequency 1	TM-22
Molecular weight of stack gases	g/g.mol	Special Frequency 1	TM-23
Oxygen	%	Special Frequency 1	TM-25
Solid particles	mg/m3	Special Frequency 1	TM-15
Sulfur dioxide	mg/m3	Special Frequency 1	TM-4
Sulfuric acid mist or sulfur trioxide or both SO3	mg/m3	Special Frequency 1	TM-3
Temperature	degrees C	Special Frequency 1	TM-2
Type 1 and type 2 substances	mg/m3	Special Frequency 1	TM-12, TM-13 and TM1-4
Velocity	m/s	Special Frequency 1	TM-2
Volatile organic compounds, as n-propane equivalent	mg/m3	Special Frequency 1	TM-34
Volumetric flow rate	m3/s	Special Frequency 1	TM-2
Selection of sampling points	_		TM-1

## Special Frequency 1 means:

- Post commissioning sampling and monitoring within one (1) month of the landfill gas (LFG) combustion commissioning;
- Quarterly sampling;
- · A minimum of four sampling events per year, for the first year of LFG combustion: and
- Sampling during combustion of LFG.

**Note:** The licensee may apply to have the sampling and monitoring requirements reduced after one (1) year following the completion of four quarterly sampling and monitoring events.

**Appendix C** 

**Environment Protection Licence EPL 4865** 

Document Set ID: 9124412 Version: 1, Version Date: 05/05/2020





**Licence Details** 

Number: 4865

Anniversary Date: 29-September

**Licensee** 

**ENVIROGUARD PTY LIMITED** 

**PO BOX 804** 

ST MARYS NSW 1790

**Premises** 

**ERSKINE PARK LANDFILL** 

**50 QUARRY ROAD** 

**ERSKINE PARK NSW 2759** 

### **Scheduled Activity**

Waste disposal (application to land)

Fee Based Activity	<u>Scale</u>
Waste disposal by application to land	Any capacity

### Region

Waste & Resource Recovery

59-61 Goulburn Street

SYDNEY NSW 2000

Phone: (02) 9995 5000

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PO Box A290

SYDNEY SOUTH NSW 1232



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### Information about this licence

### **Dictionary**

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

### Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

### Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

#### **Duration of licence**

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

#### Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

### Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

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The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

### **Transfer of licence**

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

### Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

### This licence is issued to:

ENVIROGUARD PTY LIMITED
PO BOX 804
ST MARYS NSW 1790

subject to the conditions which follow.

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### 1 Administrative Conditions

### A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Waste disposal (application to land)	Waste disposal by application to land	Any capacity

### A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
ERSKINE PARK LANDFILL
50 QUARRY ROAD
ERSKINE PARK
NSW 2759
PART LOT 4 DP 1094504, PART LOT 1 DP 1140063, PART LOT 103 DP 1143935
AS SHOWN WITHIN HATCHED AREA ON ERSKINE PARK LANDFILL LICENCED AREA DRAWING SHEETS 1 & 2 DATED 13/07/2006

### A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

Note: For the purposes of this licence the abbreviation "LEMP" is defined as the document titled Erskine Park Landfill Environmental Management Plan dated September 2007 and any amendments made to this edition.

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# 2 Discharges to Air and Water and Applications to Land

### P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

### Air

Point   Poin	EPA identi-	Type of Monitoring	Type of Discharge	Location Description
- D1  6255574N.  Dust deposition monitoring - D2  Pigure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295628E 625578N.  Dust deposition monitoring - D8  Dust deposition monitoring - D4  Dust deposition monitoring - D9  Dust deposition monitoring - D9  D1  D1  D1  D1  D1  D1  D1  D1  D1	fication no.	Point	Point	
- D2 "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295628E 6255787N.  5 Dust deposition monitoring Dust gauge labelled as "D8" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295451E 6256020N.  6 Dust deposition monitoring Dust gauge labelled as "D4" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295051E 6255980N.  7 Dust deposition monitoring Dust gauge labelled as "D7" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295051E 6255980N.  8 Dust deposition monitoring Dust gauge labelled as "D7" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295216E 6255546N.  8 Dust deposition monitoring Dust gauge labelled as "D6" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295252E 6255974N.  18 Weather monitoring station Weather monitoring station labelled as "Weather station" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 29503E 6255721N.  23 Gas Monitoring Well - GS1 Gas monitoring bore labelled as "GS1" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 29503E 6256019N.  24 Gas Monitoring Well - GS2 Gas monitoring bore labelled as "GS2" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 29563E 625609N.  25 Gas Monitoring Well - GS3 Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 29563E 625609N.  26 Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 29563E 625609N.	3			
- D8  "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295451E 6256020N.  Dust deposition monitoring - D4  "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295051E 6255980N.  Dust deposition monitoring - D7  Dust deposition monitoring - D7  Dust deposition monitoring - D7  Dust deposition monitoring - D8  B Dust deposition monitoring - D6  B Dust deposition monitoring - D6  Weather monitoring Dust gauge labelled as "D7" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295252E 6255974N.  Weather monitoring station  Weather monitoring station labelled as "D6" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295053E 6255721N.  Gas Monitoring Well - GS1  Gas Monitoring Well - GS2  Gas Monitoring Well - GS2  Gas Monitoring Well - GS3  Gas Monitoring Well - GS3  Gas Monitoring Well - GS3  Gas monitoring bore labelled as "GS2" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  Gas monitoring bore labelled as "GS2" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  Gas monitoring bore labelled as "GS2" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.	4	•		"Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295628E 6255787N.
- D4  "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295051E 6255980N.  Dust deposition monitoring - D7  Dust deposition monitoring - D7  Dust deposition monitoring - D8  B Dust deposition monitoring - D8  B Dust deposition monitoring - D8  B Dust deposition monitoring - D9  D1  D1  D1  D2  D2  D2  D2  D3  D3  D3  D3  D3  D4  D4  D4  D4  D5  D5  D5  D5  D5  D6  D5  D6  D6  D7  D7  D7  D8  D8  D8  D8  D8  D8  D8	5	•		"Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295451E 6256020N.
- D7  "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295216E 6255646N.  B Dust deposition monitoring Dust gauge labelled as "D6" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295252E 6255974N.  Weather monitoring station Weather monitoring station labelled as "Weather station" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 29503E 6255721N.  Gas Monitoring Well - GS1  Gas Monitoring Well - GS1  Gas Monitoring Well - GS2  Gas Monitoring Well - GS2  Gas Monitoring bore labelled as "GS1" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295455E 6256019N.  Gas Monitoring Well - GS2  Gas Monitoring bore labelled as "GS2" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  Gas Monitoring Well - GS3  Gas Monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.	6	•		"Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295051E 6255980N.
- D6  "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295252E 6255974N.  Weather monitoring station Weather monitoring station labelled as "Weather station" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295053E 6255721N.  Gas Monitoring Well - GS1  Gas monitoring bore labelled as "GS1" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295455E 6256019N.  Gas monitoring bore labelled as "GS2" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 625693N.  Gas Monitoring Well - GS3  Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by Site	7	•		"Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295216E 6255546N.
"Weather station" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295053E 6255721N.  23 Gas Monitoring Well - GS1 Gas monitoring bore labelled as "GS1" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295455E 6256019N.  24 Gas Monitoring Well - GS2 Gas monitoring bore labelled as "GS2" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  25 Gas Monitoring Well - GS3 Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.  25 Gas Monitoring Well - GS3 Gas monitoring bore labelled as "GS3" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by	8			"Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES,
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map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by	24	Gas Monitoring Well - GS2		map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295632E 6255693N.
	25	Gas Monitoring Well - GS3		map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by

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26	Gas Monitoring Well - GS4	Gas monitoring bore labelled as "GS4" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295225E 6255568N.
27	Gas Monitoring Well - GS9	Gas monitoring bore labelled as "GS9"on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 294960E 6255743N.
29	Gas Monitoring Well - GS6	Gas monitoring bore labelled as "GS6" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295257E 6255960N.
31	Gas Monitoring Well - GS7	Gas monitoring bore labelled as "GS7"on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295057E 6256001N.
32	Gas Monitoring Well - GS8	Gas monitoring bore labelled as "GS8"on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295546E 6255576N.

- P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.
- P1.3 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

### Water and land

EPA Identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Retention Dam - SD004		Retention dam located at the SE boundary of the landfill labelled as "SD004" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295009E 6255659N.
2	Leachate quality monitoring - LP002		Concrete leachate riser labelled as "LP002" (Secondary Leachate Riser) 295285E 6255810N
9	Groundwater monitoring point - BH18		Groundwater monitoring bore labelled as "BH 18" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295320E 6255935N.
10	Groundwater monitoring point - BH15A		Groundwater monitoring bore labelled as "BH15A" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295001E 6255888N.

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11	Groundwater monitoring point - BH15B		Groundwater monitoring bore labelled as "BH15B" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295017E 6255898N.
12	Groundwater monitoring point - BH16A		Groundwater monitoring bores labelled as "BH16A" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295628E 6255781N.
13	Groundwater monitoring point - BH16B		Groundwater monitoring bore labelled as "BH16B" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295630E 6255786N.
14	Groundwater monitoring point - BH17E		Groundwater monitoring bore labelled as "BH17E" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 294952E 6255744N.
15	Groundwater monitoring point - BH17D		Groundwater monitoring bore labelled as "BH17D" oon map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 294955E 6255742N.
16	Sedimentation Dam - SD003	Sedimentation Dam - SD003	Sedimentation pond located in the north-west corner of the landfill labelled as "SD003" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295055E 625610
17	Sedimentation Dam - SD002	Sedimentation Dam - SD002	Sedimentation pond located in the south-east corner of the landfill labelled as "SD002" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295622E 6255643N.
19	Groundwater Monitoring Point - BH19		Groundwater monitoring bore labelled as "BH19" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295324E 6255995N.

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20	Groundwater Monitoring Point - BH21	Groundwater monitoring bore labelled as "BH21" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295477E 6255620N.
21	Groundwater Monitoring Point - BH22	Groundwater monitoring bore labelled as "BH22" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295474E 6255620N.
22	Groundwater Monitoring Point - BH23	Groundwater monitoring bore labelled as "BH23" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295467E 6255629N.
28	Groundwater Monitoring Point - BH24	Groundwater monitoring bore labelled as "BH24" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295176E 6255602N.
30	Groundwater Monitoring Point - BH20	Groundwater monitoring bore labelled as "BH20" on map titled "Figure 2: Location of Monitoring Sites" dated 6 November 2009 prepared by CES, 295263E 6255964N.
33	Leachate quality monitoring - LP003	Auxiliary Riser (Feeding to Leachate Treatment Plant & Online Ammonia Analyser) 295200E 6255750N

### 3 Limit Conditions

### L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

### L2 Concentration limits

- L2.1 For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the

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specified ranges.

- L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.
- L2.4 Water and/or Land Concentration Limits

### **POINT 16**

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Ammonia	milligrams per litre				1
рН	рН				6.5-8.5
Total suspended solids	milligrams per litre				50

### **POINT 17**

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Ammonia	milligrams per litre				1
рН	рН				6.5-8.5
Total suspended solids	milligrams per litre				50

### L3 Volume and mass limits

- L3.1 The licensee must not discharge from Points 1, 16 and 17 unless:
  - a) The discharge from Points 1, 16 and 17 is a result of rainfall causing the sedimentation dam to overflow; and
  - b) The licensee has taken all practical measures to avoid or minimise water pollution; and
  - c) The 100 percentile Concentration Limit for Ammonia applies to all discharges.

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### L4 Waste

L4.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	General solid waste (non-putrescible)	As defined in Schedule 1 of the POEO Act, as in force from time to time	Waste disposal (application to land)	A maximum quantity of 1,000,000 tonnes of waste may be disposed from 1 January to 31 December in any year
NA	Asbestos waste	As defined in Schedule 1 of the POEO Act, as in force from time to time	Waste disposal (application to land)	A maximum quantity of 1,000,000 tonnes of waste may be disposed from 1 January to 31 December in any year
NA	Waste tyres	As defined in Schedule 1 of the POEO Act, as in force from time to time	Waste disposal (application to land)	A maximum quantity of 1,000,000 tonnes of waste may be disposed from 1 January to 31 December in any year
NA	General solid waste (non-putrescible)	Immobilised waste which is assessed as General Solid Waste (non-putrescible) and are subject to general or specific immobilisation approvals	Waste disposal (application to land)	A maximum quantity of 1,000,000 tonnes of waste may be disposed from 1 January to 31 December in any year
NA	Waste	Any waste received on site that is below licensing thresholds in Schedule 1 of the POEO Act, as in force from time to time	-	NA

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- L4.2 The licensee must not dispose of any tyres on the premises which;
  - a) have a diameter of less than 1.2 metres; and
  - b) are delivered at the premises in a load containing more than 5 whole tyres; and
  - c) became waste in the Sydney Metropolitan Area.
- L4.3 For the purpose of this condition:
  - a) Tyres are taken to be shredded only if the tyres are in pieces measuring no more than 250 mm in any direction; and
  - b) Domestic load means a load containing no more than 5 tyres having a diameter of less than 1.2 metres
- L4.4 Tyres stockpiled on the premises must:
  - a) not exceed fifty (50) tonnes of tyres at any one time; and
  - b) be located in a clearly defined area away from the tipping face; and
  - c) be managed to control vermin; and
  - d) be managed to prevent any tyres from catching fire.

### L5 Noise limits

L5.1

Location	Day
	LAeq (15 minutes)
Mamre Road Residence*	45
Erskine Park Road Residence*	54

Note: \*As identified in section 7.8 of volume 1 of the document titles, "Environmental Impact Statement - Enviroguard - Erskine Park Landfill - Revised Final Profile - National Environmental Consulting Services" dated 17 October 2005.

Note: The noise limits represent the noise contribution from the landfill site for the modifications to the final profile.

- L5.2 Noise from the premises is to be measured at the most affected point on or within the residential property boundary or, if that is more than 30 metres from the residence, at the most-affected point within 30 metres of the residence to determine compliance with condition L5.1.
- L5.3 The noise emission limits identified in condition L5.1 apply under meteorological conditions of:
  - a) Wind speed up to 3m/s at 10 metres above ground level; or
  - b) Temperature inversion conditions of up to 3oC/100m and wind speed up to 2m/s at 10 metres above the ground.

### L6 Hours of operation

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L6.1 The hours of operation are limited to those shown in condition 18 of development consent no 163/93 issued by Penrith City Council. These are 6am to 5pm Monday to Friday, 6am to 4pm Saturdays and 7am to 4pm Sundays and public holidays.

### L7 Potentially offensive odour

- L7.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.
- Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

### 4 Operating Conditions

### O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.
- O1.2 All operations and activities occurring at the premises must be carried out in a manner that will prevent and minimise fire at the premises.
- O1.3 The licensee must ensure that the landfill cells are capped progressively and in accordance with EPA's Environmental Guidelines: Solid Waste Landfills (1996)" or equivalent.
- O1.4 Final capping must be carried out in accordance with "EPA Environmental Guidelines: Solid Waste Landfills (1996)" or other EPA approved capping design.

### O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
  - a) must be maintained in a proper and efficient condition; and
  - b) must be operated in a proper and efficient manner.

### O3 Dust

O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

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### O4 Processes and management

O4.1 The licensee must take all practicable steps to control entry to the premises.

### O5 Waste management

- O5.1 The leachate collection system must be maintained so as to collect and impound without discharge to waters external to the premises, all leachate generated by rainfall events of less than 1 in 25 year recurrence interval of 24 hours duration.
- O5.2 A leachate barrier system with a minimum in-situ coefficient of permeability less than 10-9 m/sec must be installed in the leachate storage pond(s) and the drains that connect the ponds to the leachate collection system.
- O5.3 All rainfall which comes into contact with waste, daily cover and intermediate cover must be managed as leachate, unless otherwise approved by the EPA.
- O5.4 Leachate must not be discharged to surface waters.
- O5.5 Leachate applied to the tipping face and/or used for dust suppression must not be directed to the sediment control dams.
- O5.6 The Licensee must ensure that the leachate level in the landfill (measured at point 2) does not exceed 30 metres AHD.
- O5.7 The licensee must monitor the standing water level of leachate (measured at LP002) at a quarterly frequency, and each measurement must be taken at least 48 hours after any leachate is extracted from the landfilled waste.
- O5.8 The licensee must manage immobilised waste in a manner that ensures that it continues to meet the criteria described for General Solid Waste (non-putrescible) in accordance with the DECC Waste Classification Guidelines, as in force from time to time.
- O5.9 The licensee must ensure that immobilised waste(s) are not crushed and/or compacted.
- O5.10 The licensee must cover all immobilised waste on the day of its receival.
- O5.11 Waste must not be placed at elevations above those depicted in Figure 5 of volume 1 of the document titled "Environmental Impact Statement Enviroguard Erskine Park Landfill Revised Final Profile National Environmental Consulting Services" and dated 17 October 2005.
- O5.12 Cover material must be
  - a) Daily cover Daily cover material must be either

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- (i) Virgin excavated natural material (VENM); or
- (ii) NSW EPA approved alternative daily cover (ADC).

Cover material must be applied to a minimum depth of 15 centimetres over all exposed landfilled waste prior to ceasing operations at the end of each day.

#### b) Intermediate cover

Cover material must be applied to a depth of 30 centimetres over surfaces of the landfilled waste at the premises which are to be exposed for more than 90 days.

### c) Cover material stockpile

At least two weeks cover material must be available at the premises under all weather conditions. This material may be won on site, or alternatively a cover stockpile must be maintained adjacent to the tip face.

- O5.13 In accordance with Condition O5.12 a) (ii) the Licensee may apply material as an alternative daily cover that meets all the following criteria:
  - a) The alternative daily cover must consist only of crushed concrete and/or crushed bricks and/or crushed clay tiles and/or crushed glass fines from domestic or commercial recycling collections, mixed with soil. The amount of soil in the mixture must be at least 25% (by mass).
  - b) The alternative daily cover must be applied to a depth of at least 150mm prior to ceasing operations at the end of each day.
  - c) The alternative daily cover material must not contain contaminants at concentrations above those specified for General Solid Waste (Non-putrescible) in Tables 1 and 2 of the Waste Classification Guidelines, Part 1: Classifying Waste.
  - d) The alternative daily cover material must not contain asbestos, food waste, animal waste, grease trap waste, biosolids, rubber, plastic, bitumen, asphalt, paper, cloth, paint, wood, other vegetable matter, plaster and metal.
  - e) The maximum permissible dimension of particles is 50mm and 50% by mass of the material must be comprised of particles less than 1mm in diameter. Note: To meet all of the requirements in this approval it is likely that the alternative daily cover will require processing into a fine particle size.
  - f) The alternative daily cover material must have the ability to suppress odours from the landfilled waste and must not itself generate offensive odours.
  - g) Rainwater which comes into contact with the alternative daily cover must be managed as landfill leachate.
- O5.14 Where wastes are received at the premises for purposes of storage or processing or transfer to another premises, then such wastes are not required to be covered on a daily basis provided that:
  - a) Such wastes are stored and managed so as not to cause or be likely to cause any off-site environmental effects; and
  - b) Such wastes are stored in a clearly defined area of the premises away from the tipping face.
- O5.15 The last licensee must prepare and submit to the EPA within three months prior to the last load of waste being landfilled a closure plan in accordance with section 76 of the Protection of the Environment Operations Act 1997.

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### O6 Other operating conditions

- O6.1 The licensee must install and operate stormwater control infrastructure, as detailed in of volume 1 of the document titled "Environmental Impact Statement Enviroguard Erskine Park Landfill Revised Final Profile National Environmental Consulting Services" and dated 17 October 2005, to receive and treat all run-off from completed surfaces of the landfill.
- O6.2 Stormwater sedimentation basins must be operated and maintained so as to collect and impound, without discharge to surface waters external to the premises, all surface water run-off from storm events of less than a 1 in 5-year recurrence interval of 24 hours duration.

### 5 Monitoring and Recording Conditions

### M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
  - a) in a legible form, or in a form that can readily be reduced to a legible form;
  - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
  - a) the date(s) on which the sample was taken;
  - b) the time(s) 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.

### M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:
- M2.2 Air Monitoring Requirements

### POINT 3,4,5,6,7,8

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Monthly	Australian Standard 3580.10.1-1991

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### M2.3 Water and/ or Land Monitoring Requirements

### POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen (ammonia)	milligrams per litre	Quarterly	Grab sample
рН	рН	Quarterly	Grab sample
Total suspended solids	milligrams per litre	Quarterly	Grab sample

### POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium	milligrams per litre	Yearly	Grab sample
carbonate)			
Aluminium	milligrams per litre	Yearly	Grab sample
Arsenic	milligrams per litre	Yearly	Grab sample
Barium	milligrams per litre	Yearly	Grab sample
Cadmium	milligrams per litre	Yearly	Grab sample
Calcium	milligrams per litre	Yearly	Grab sample
Chloride	milligrams per litre	Yearly	Grab sample
Chromium (hexavalent)	milligrams per litre	Yearly	Grab sample
Cobalt	milligrams per litre	Yearly	Grab sample
Conductivity	microsiemens per centimetre	Quarterly	Probe
Copper	milligrams per litre	Yearly	Grab sample
Ethyl benzene	milligrams per litre	Yearly	Grab sample
Fluoride	milligrams per litre	Yearly	Grab sample
Magnesium	milligrams per litre	Yearly	Grab sample
Manganese	milligrams per litre	Yearly	Grab sample
Mercury	milligrams per litre	Yearly	Grab sample
Nitrate	milligrams per litre	Yearly	Grab sample
Nitrite	milligrams per litre	Yearly	Grab sample
Nitrogen (ammonia)	milligrams per litre	Yearly	Grab sample
Organochlorine pesticides	milligrams per litre	Yearly	Grab sample
Organophosphate pesticides	milligrams per litre	Yearly	Grab sample
pH	рН	Quarterly	Grab sample
Phosphorus (total)	milligrams per litre	Yearly	Grab sample
Polychlorinated biphenyls	milligrams per litre	Yearly	Grab sample
Polycyclic aromatic hydrocarbons	milligrams per litre	Yearly	Grab sample

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Potassium	milligrams per litre	Yearly	Grab sample
Sodium	milligrams per litre	Yearly	Grab sample
Standing Water Level	metres	Yearly	In situ
Sulfate	milligrams per litre	Yearly	Grab sample
Toluene	milligrams per litre	Yearly	Grab sample
Total chromium	milligrams per litre	Yearly	Grab sample
Total dissolved solids	milligrams per litre	Yearly	Grab sample
Total organic carbon	milligrams per litre	Yearly	Grab sample
Total petroleum hydrocarbons	milligrams per litre	Yearly	Grab sample
Total Phenolics	milligrams per litre	Yearly	Grab sample
Xylene	milligrams per litre	Yearly	Grab sample
Zinc	milligrams per litre	Yearly	Grab sample

### POINT 9,10,11,12,13,14,15,19,20,21,22,28,30

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Quarterly	Grab sample
Aluminium	milligrams per litre	Yearly	Grab sample
Arsenic	milligrams per litre	Yearly	Grab sample
Barium	milligrams per litre	Yearly	Grab sample
Benzene	milligrams per litre	Yearly	Grab sample
Cadmium	milligrams per litre	Yearly	Grab sample
Calcium	milligrams per litre	Quarterly	Grab sample
Chloride	milligrams per litre	Quarterly	Grab sample
Chromium (hexavalent)	milligrams per litre	Yearly	Grab sample
Chromium (total)	milligrams per litre	Yearly	Grab sample
Cobalt	milligrams per litre	Yearly	Grab sample
Copper	milligrams per litre	Yearly	Grab sample
Ethyl benzene	milligrams per litre	Yearly	Grab sample
Fluoride	milligrams per litre	Yearly	Grab sample
Lead	milligrams per litre	Yearly	Grab sample
Magnesium	milligrams per litre	Quarterly	Grab sample
Manganese	milligrams per litre	Yearly	Grab sample
Mercury	milligrams per litre	Yearly	Grab sample
Nitrate	milligrams per litre	Yearly	Grab sample
Nitrite	milligrams per litre	Yearly	Grab sample
Nitrogen (ammonia)	milligrams per litre	Quarterly	Grab sample
Organochlorine pesticides	milligrams per litre	Yearly	Grab sample
Organophosphate pesticides	milligrams per litre	Yearly	Grab sample
pH	рН	Quarterly	Probe

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Polycyclic aromatic hydrocarbons	milligrams per litre	Yearly	Grab sample
Potassium	milligrams per litre	Quarterly	Grab sample
Sodium	milligrams per litre	Quarterly	Grab sample
Standing Water Level	metres	Quarterly	In situ
Sulfate	milligrams per litre	Quarterly	Grab sample
Toluene	milligrams per litre	Yearly	Grab sample
Total dissolved solids	milligrams per litre	Quarterly	Grab sample
Total organic carbon	milligrams per litre	Quarterly	Grab sample
Total petroleum hydrocarbons	milligrams per litre	Yearly	Grab sample
Total Phenolics	milligrams per litre	Yearly	Grab sample
Xylene	milligrams per litre	Yearly	Grab sample
Zinc	milligrams per litre	Yearly	Grab sample

### **POINT 16,17**

Pollutant	Units of measure	Frequency	Sampling Method
BOD	milligrams per litre	Quarterly	Grab sample
Chemical oxygen demand	milligrams per litre	Quarterly	Grab sample
Conductivity	microsiemens per centimetre	Quarterly	Grab sample
Nitrogen (ammonia)	milligrams per litre	Quarterly	Grab sample
рН	рН	Quarterly	Grab sample
Total organic carbon	milligrams per litre	Quarterly	Grab sample
Total suspended solids	milligrams per litre	Quarterly	Grab sample

### POINT 33

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	Other Approved Method 1
Aluminium	milligrams per litre	Yearly	Other Approved Method 1
Arsenic	milligrams per litre	Yearly	Other Approved Method 1
Barium	milligrams per litre	Yearly	Other Approved Method 1
Cadmium	milligrams per litre	Yearly	Other Approved Method 1
Calcium	milligrams per litre	Yearly	Other Approved Method 1
Chloride	milligrams per litre	Yearly	Other Approved Method 1
Chromium (hexavalent)	milligrams per litre	Yearly	Other Approved Method 1
Cobalt	milligrams per litre	Yearly	Other Approved Method 1
Conductivity	microsiemens per centimetre	Quarterly	Probe
Copper	milligrams per litre	Yearly	Other Approved Method 1

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Ethyl benzene	milligrams per litre	Yearly	Other Approved Method 1
Fluoride	milligrams per litre	Yearly	Other Approved Method 1
Magnesium	milligrams per litre	Yearly	Other Approved Method 1
Manganese	milligrams per litre	Yearly	Other Approved Method 1
Mercury	milligrams per litre	Yearly	Other Approved Method 1
Nitrate	milligrams per litre	Yearly	Other Approved Method 1
Nitrite	milligrams per litre	Yearly	Other Approved Method 1
Nitrogen (ammonia)	milligrams per litre	Yearly	Other Approved Method 1
Organochlorine pesticides	milligrams per litre	Yearly	Other Approved Method 1
Organophosphate pesticides	milligrams per litre	Yearly	Other Approved Method 1
pH	milligrams per litre	Quarterly	Other Approved Method 1
Phosphorus (total)	milligrams per litre	Yearly	Other Approved Method 1
Polychlorinated biphenyls	milligrams per litre	Yearly	Other Approved Method 1
Polycyclic aromatic hydrocarbons	milligrams per litre	Yearly	Other Approved Method 1
Potassium	milligrams per litre	Yearly	Other Approved Method 1
Sodium	milligrams per litre	Yearly	Other Approved Method 1
Standing Water Level	metres	Yearly	In situ
Sulfate	milligrams per litre	Yearly	Other Approved Method 1
Toluene	milligrams per litre	Yearly	Other Approved Method 1
Total chromium	milligrams per litre	Yearly	Other Approved Method 1
Total dissolved solids	milligrams per litre	Yearly	Other Approved Method 1
Total organic carbon	milligrams per litre	Yearly	Other Approved Method 1
Total petroleum hydrocarbons	milligrams per litre	Yearly	Other Approved Method 1
Total Phenolics	milligrams per litre	Yearly	Other Approved Method 1
Xylene	milligrams per litre	Yearly	Other Approved Method 1
Zinc	milligrams per litre	Yearly	Other Approved Method 1

M2.4 For the purposes of monitoring point 33 the 'Other Approved Method 1' refers to reading from the online ammonida analyser of the Leachate Treatment Plant.

### M3 Testing methods - concentration limits

- M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
  - a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
  - b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
  - c) if no such requirement is imposed by or under the Act or by a condition of this licence, any

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methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

### M4 Weather monitoring

M4.1

Parameter (Point 18)	Units of Measure	Frequency	Averaging Period	Sampling Method
Air Temperature	Degrees Celsius	Continuous	1 hour	AM-4
Wind direction	Degrees	Continuous	15 minute	AM-2 & AM-4
Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4
Rainfall	mm	Continuous	1 hour	AM-4
Rainfall	mm	Continuous	24 hour	AM-4
Evaporation	mm	Continuous	24 hour	AM-4
- Siting - Measurement				AM-1 & AM-4 AM-2 & AM-4

Note: Methods AM-2 and AM-4 are specified in the "Approved Methods for Sampling and Analysis of Air Pollutants in NSW" and all monitoring must be conducted strictly in accordance with the requirements outlined in this document.

### M5 Recording of pollution complaints

- M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M5.2 The record must include details of the following:
  - a) the date and time of the complaint;
  - b) the method by which the complaint was made;
  - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
  - d) the nature of the complaint;
  - e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the

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complainant; and

- f) if no action was taken by the licensee, the reasons why no action was taken.
- M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

### M6 Telephone complaints line

- M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

### M7 Other monitoring and recording conditions

- M7.1 The licensee must record the following data for every fire at the premises:
  - a) Time and date that the fire started;
  - b) Time and date that the fire was either burnt out or extinguished;
  - c) Location of the fire (eg. clean timber stockpile, putrescible garbage cell etc.);
  - d) Prevailing weather conditions; and
  - e) Observations made in regard to smoke direction and dispersion.
- M7.2 The licensee must monitor landfill gas quarterly and otherwise in accordance with Benchmark 17 of the EPA's publication titled "Environmental Guidelines: Solid Waste Landfills".

### 6 Reporting Conditions

### R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
  - 1. a Statement of Compliance,
  - 2. a Monitoring and Complaints Summary,
  - 3. a Statement of Compliance Licence Conditions,
  - 4. a Statement of Compliance Load based Fee,
  - 5. a Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan,
  - 6. a Statement of Compliance Requirement to Publish Pollution Monitoring Data; and
  - 7. a Statement of Compliance Environmental Management Systems and Practices.

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At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

- R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.
- R1.3 Where this licence is transferred from the licensee to a new licensee:
  - a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
  - b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.
- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
  - a) in relation to the surrender of a licence the date when notice in writing of approval of the surrender is given; or
  - b) in relation to the revocation of the licence the date from which notice revoking the licence operates.
- R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
  - a) the licence holder; or
  - b) by a person approved in writing by the EPA to sign on behalf of the licence holder.
- Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.
- Note: An application to transfer a licence must be made in the approved form for this purpose.

### R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.
- R2.3 The licensee must notify the EPA within 24 hours of becoming aware that landfill gas with a concentration of methane greater than 1.25% v/v has migrated in the subsurface beyond the boundary of the premises.

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Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

### R3 Written report

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
  - a) where this licence applies to premises, an event has occurred at the premises; or
  - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,
  - and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
  - a) the cause, time and duration of the event;
  - b) the type, volume and concentration of every pollutant discharged as a result of the event;
  - c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
  - d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
  - e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
  - f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
  - g) any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

### 7 General Conditions

### G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

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### 8 Pollution Studies and Reduction Programs

### **U1** Ongoing groundwater management

U1.1 The licensee must prepare and submit a report to the EPA within two months of any groundwater monitoring at the premises that detects ammonia at a concentration above 15 mg/L in any groundwater monitoring bore on this licence. The report must propose actions which the licensee will implement (including timeframes) to prevent contaminated groundwater migrating from the premises.

### 9 Special Conditions

### E1 Financial assurance

E1.1 A financial assurance, in favour of the EPA, in the amount of one million dollars (\$1,000,000) must be maintained during the operation of the facility and thereafter until such time as the EPA is satisfied the premises are environmentally secure.

This assurance must be replenished to the full amount should the EPA have any reason to call up the financial assurance or any part thereof to correct environmental problems which have not been remedied by the occupier upon being given notice to do so.

Failure to maintain the assurance at the full amount will result in suspension of this Licence.

This financial assurance shall be indexed to the Consumer Price Index (CPI). The EPA reserves the right to vary the magnitude of the bank guarantee at any time depending upon any reassessment of possible cost(s) of rehabilitation of the premises.

### **E2** Alternative Daily Cover - Operational Trial

E2.1 The licensee is permitted to undertake an alternative daily cover trial of waste at the tip face for six trial events over a six month period. Each trial event must be no longer than 48 hours.

The trial must be conducted in accordance with:

- a) the document titled "Trial Proposal for Recovered Fines use as Alternative Landfill Cover" prepared
- by ResourceCo Pty Ltd dated 27 June 2018 and filed on EPA files at DOC18/547028, and
- b) the EPA's Environmental Guidelines: Solid Waste Landfills (2nd Edition, 2016).
- E2.2 The six month period referred to in condition E2.1 shall commence from the first day alternative daily cover is utilised at the premises.
- E2.3 The alternative daily cover must not contain asbestos, food waste, animal waste, grease trap waste, biosolids or vegetable matter.
- E2.4 The licensee must provide a written report to the Director Waste Compliance within 30 days of the end of the alternative daily cover trial.

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The report must be submitted via email to <u>waste.operations@epa.nsw.gov.au</u> and must include, but not be limited to:

- a) an assessment of the effectiveness and consistency of the alternative daily cover in meeting the required outcomes for the covering of waste at Section 8 and any other relevant sections of the Environmental Guidelines: Solid Waste Landfills (NSW EPA, Second edition, 2016);
- b) data relating to the analytical testing of the alternative daily cover material including but not limited to particle size distribution, physical contaminant levels, asbestos, and waste classification requirements;
- c) photographs of the alternative daily cover prior to, during, and after placement at the tip face, and at stripping;
- d) benchmarking the performance of the alternative daily cover against virgin excavated natural material as daily cover;
- e) any other relevant findings of the trial.

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### Dictionary

### **General Dictionary**

3DGM [in relation
to a concentration
limit]

Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples

Act Means the Protection of the Environment Operations Act 1997

activity Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment

Operations Act 1997

actual load Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009

AM Together with a number, means an ambient air monitoring method of that number prescribed by the

Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.

AMG Australian Map Grid

**anniversary date** The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a

licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the

commencement of the Act.

annual return Is defined in R1.1

Approved Methods Publication

Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009

assessable pollutants

Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009

BOD Means biochemical oxygen demand

CEM Together with a number, means a continuous emission monitoring method of that number prescribed by

the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.

COD Means chemical oxygen demand

composite sample Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples

collected at hourly intervals and each having an equivalent volume.

cond. Means conductivity

**environment** Has the same meaning as in the Protection of the Environment Operations Act 1997

environment protection legislation Has the same meaning as in the Protection of the Environment Administration Act 1991

**EPA** Means Environment Protection Authority of New South Wales.

fee-based activity Mclassification (G

Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.

general solid waste (non-putrescible)

Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act





flow weighted Means a sample whose composites are sized in proportion to the flow at each composites time of composite sample collection. Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environmen t Operations Act general solid waste (putrescible) 1997 grab sample Means a single sample taken at a point at a single time hazardous waste Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997 Means the licence holder described at the front of this licence licensee load calculation Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009 protocol local authority Has the same meaning as in the Protection of the Environment Operations Act 1997 material harm Has the same meaning as in section 147 Protection of the Environment Operations Act 1997 **MBAS** Means methylene blue active substances Minister Means the Minister administering the Protection of the Environment Operations Act 1997 mobile plant Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act motor vehicle Has the same meaning as in the Protection of the Environment Operations Act 1997 O&G Means oil and grease percentile [in Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit relation to a specified in the licence for that pollutant over a specified period of time. In this licence, the specified period concentration limit of time is the Reporting Period unless otherwise stated in this licence. of a sample] plant Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles pollution of waters Has the same meaning as in the Protection of the Environment Operations Act 1997 [or water pollution] premises Means the premises described in condition A2.1 public authority Has the same meaning as in the Protection of the Environment Operations Act 1997 regional office Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence reporting period For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act. restricted solid Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act waste scheduled activity Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997

Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

Sampling and Analysis of Air Pollutants in New South Wales.

Together with a number, means a test method of that number prescribed by the Approved Methods for the

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1997

special waste

TM

putrescible), special waste or hazardous waste

Licence - 4865



Means total suspended particles **TSP** Means total suspended solids TSS Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or Type 1 substance more of those elements Type 2 substance Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements utilisation area Means any area shown as a utilisation area on a map submitted with the application for this licence waste Has the same meaning as in the Protection of the Environment Operations Act 1997 Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non waste type

Mr Greg Sheehy

**Environment Protection Authority** 

(By Delegation)

Date of this edition: 27-June-2001

Environment Protection Authority - NSW Document Set ID: 9124413 Version: 1, Version Date: 05/05/2020 20-Mar-2019

Licence - 4865



### **End Notes**

- 1 Licence varied by notice 1028719, issued on 04-Jul-2003, which came into effect on 29-Jul-2003.
- 2 Licence varied by notice 1053138, issued on 02-Dec-2005, which came into effect on 27-Dec-2005.
- 3 Licence varied by notice 1060804, issued on 29-May-2006, which came into effect on 29-May-2006.
- 4 Licence varied by notice 1067269, issued on 19-Mar-2007, which came into effect on 19-Mar-2007.
- 5 Licence varied by notice 1074334, issued on 17-Jul-2007, which came into effect on 17-Jul-2007.
- 6 Licence varied by notice 1077901, issued on 02-Sep-2008, which came into effect on 02-Sep-2008.
- 7 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 8 Licence varied by notice 1095272, issued on 28-Nov-2008, which came into effect on 28-Nov-2008.
- 9 Licence fee period changed by notice 1114358 approved on .
- 10 Licence varied by notice 1114405, issued on 03-Jun-2011, which came into effect on 03-Jun-2011.
- 11 Licence varied by notice 1505834 issued on 08-May-2012
- 12 Licence varied by notice 1508294 issued on 27-Aug-2012
- 13 Licence varied by notice 1508965 issued on 11-Oct-2012
- 14 Licence varied by notice 1513491 issued on 03-May-2013
- 15 Licence varied by notice 1528025 issued on 17-Apr-2015
- 16 Licence varied by notice 1569274 issued on 20-Mar-2019

**Appendix D** 

**Erosion and Sediment Control Plan** 

Document Set ID: 9124412 Version: 1, Version Date: 05/05/2020

### **GENERAL NOTES**

- This Erosion and Sediment Control Plan (the ESCP) is prepared in support of an application to modify DA 13/0655 (issued by Penrith City Council) for the relocation of a section of a gas pipeline ("the relocated Pipeline") within the Erskine Park Landfill.
- This ESCP replaces the 2014 ESCP, with those works having been completed, and is intended to comply with and form part of conditional requirements of the modified DA 13/0655.
- The ESCP provides instruction on the erosion and sediment control features and management for the following domains.
  - New trench for relocated pipeline within Disturbed Land (NT<sub>D</sub>)
  - Removal of pipeline from existing trenched pipeline (ET<sub>D</sub>). (refer to Drawing ESCP001).
- The erosion and sediment control features are identified for each domain with final location to be determined by the Project Manager or Construction Supervisor prior to disturbance along any length of trench.
- Open trench sections are not to be maintained for longer than 3 days, i.e. section of trench to be excavated must not exceed that which pipeline installation/removal and trench backfill can be completed within 3 days.
- Erosion and sediment control structures, i.e. sediment fencing, are to remain in place until rehabilitation of each section of works has been completed.
- The ESCP is valid for construction of the relocated pipeline and removal of the identified existing pipeline section and becomes void on completion of works to the satisfaction of the relevant authority / certifier.

### **ESCP IMPLEMENTATION**

Works are to proceed in the following order:

### **Site Preparation**

- Delineate No Go Areas with barrier fence, sediment fence, tape or other suitable means (where existing barriers are not in place) in the areas nominated on ESCP Drawings 2a and 2b. Ensure vehicles and personnel do not enter these areas.
- 2. Establish sediment fencing down-slope of trench related disturbance prior to commencement of excavation (Refer to Notes on Sediment Fencing).
- 3. Establish alignment of Temporary Access. No clearance of vegetation or stripping of surface materials is to be undertaken unless absolutely necessary.

### Pipeline Installation / Removal

- 4. Commence trench excavation in accordance with Figure E1.
- 5. Install pipeline within the trench and backfill as illustrated in **Figure E1** OR removal of the existing pipeline.

#### Site Rehabilitation

6. Soil or VENM surplus to backfill requirements for new sections of pipeline to be transferred to the Erskine Park Landfill.

- 7. Soil or VENM deficit for backfilling the section of removed pipeline are to be sourced from the Erskine Park Landfill.
- 8. Undertake rehabilitation of backfilled trench (refer to Notes for Rehabilitation).
- Once each section of trench is rehabilitated, or other surface disturbance works stabilised, the sediment fencing can be removed.
- 10. Undertake a self-auditing program (Refer to Self-auditing Program Notes).

### **FACILITY ACCESS AND BARRIER FENCING**

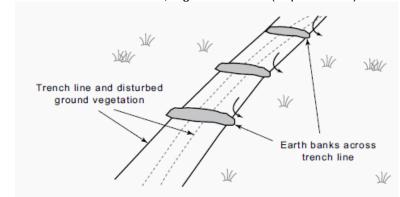
- Barrier fencing / tape or sediment fencing will ensure that all vehicles entering and leaving the Pipeline works area do not access areas beyond the nominated perimeter of the Pipeline.
- **ESCP Drawings 2a** and **2b** provide guidance on the establishment of barrier fencing / tape and sediment fencing to control access and prevent entry to No Go Areas.
- Soils erosion hazard will be kept as low as practicable by minimizing land disturbance in accordance with Table 1.

### SEDIMENT FENCING

- ESCP Drawings 2a and 2b provide guidance on the establishment of sediment fencing, i.e. down-slope of disturbance and stockpiled soil and other construction materials, e.g. bedding sand.
- Install fencing as described by SD 6-8 (see ESCP Drawing 4)

### **STABILISATION**

- As pipeline installed within trench, replace and compact subsoil, then replace (do not compact) topsoil.
- Undertake progressive stabilisation of disturbed ground surfaces as completed (refer to **Table 2**).
- On steep or long slopes, construct earth banks perpendicular to the alignment of the trench (see **Figure E2**).
- Appropriate seedbed preparation will be carried out, i.e. in accordance with SD 7-1 (see **ESCP Drawing 4**).
- As surfaces are stabilized, temporary water management structures can be removed, e.g. earth banks (or portions of).



Source: Managing Urban Stormwater: Soils and Construction Vol. 2A – Figure 6.1

Figure E2 Earth Bank Stabilisation

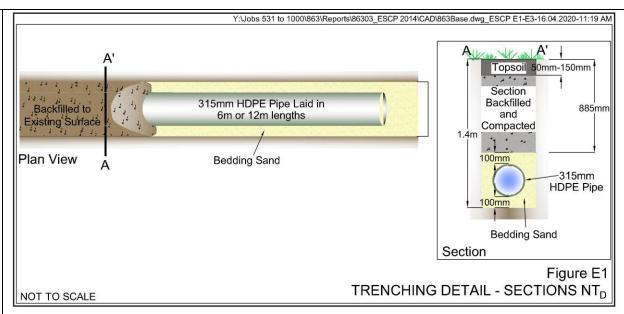


	TABLE 1 LIMITATIONS TO A	CCESS DURING CONSTRUCTION
LAND USE	LIMITATION	REMARKS
Construction Areas	Limited to 5m from the edge of any essential construction activity as shown on the engineering plans	All site workers should clearly recognise these areas that, where appropriate, are identified with barrier fencing (upslope) and sediment fencing (downslope) or similar materials.
Access Areas	Limited to a maximum width of 5m	The site manager will determine and mark the location of these zones on the site. They can vary in position so as to best conserve existing vegetation and protect downstream areas while being considerate of the needs of efficient works activities. All site workers will clearly recognise these boundaries.
Remaining lands including revegetation areas	Entry prohibited except for essential management works.	Thinning of growth might be necessary as part of bush fire management plans or weed reduction strategies.

TABLE 2 MAXIMUM ACCEPTAI	BLE C-FACTORS	S AT NOMINATED TIMES DURING WORKS
LANDS	MAXIMUM C-FACTOR	REMARKS
Waterways and other areas subjected to concentrated flows (e.g. table drains), post-construction and during operation.	0.05	Applies after ten working days from completion of formation and before they are allowed to carry any concentrated flows. Flows will be limited to those shown in Table 5.2 of Landcom (2004). Foot and vehicular traffic will be prohibited in these areas.
Stockpiles and batters, post- construction and during operation.	0.10	Applies after ten working days from completion of formation. Maximum C-Factor of 0.10 equals 60% ground cover.
All lands, including waterways and stockpiles during construction and operation.	0.15	Applies after 20 working days of inactivity, even though works might continue later. Maximum C- Factor of 0.15 equals 50% ground cover.
All lands, including waterways and stockpiles during construction and operation.	0.05	Applies after 60 working days of inactivity. Maximum C-Factor of 0.05 equals 70% ground cover.

REV BY APP. **REVISION DETAILS** DRAWING STATUS DATE 0 04/08/2014 ΑI SW Original **DESIGN BY:** МΔ 16/04/2020 17/04/2020 MA SH **Relocation of Pipeline** DRAWN BY MA 16/04/2020 FINAL APPROVAL 30/04/2020 30/04/20 SH **EME Advisory Comments** ΕB 2 MA

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ERSKINE PARK LANDFILL GAS PIPELINE RELOCATION

EROSION AND SEDIMENT CONTROL PLAN NOTES 1

PROJECT NO. SHEET NO. REV 2 863/04 ESCP 01

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## SPILL MANAGEMENT AND CONTINGENCY MANAGEMENT

In the event of a spillage, the following is to be undertaken.

- All work in the vicinity of the spillage is to cease.
- The source of the spill or leak is to be identified and once determined to be safe to do so stopped.
- If required, a temporary earth bund is to be pushed up to prevent further discharge of spilled material.
- The spilled material is to be removed by available sucker truck or other appropriate mechanisms.
- Project Manager is to identify as to whether material environmental harm has occurred and if so the EPA is to be notified and advice sought regarding further mitigation measures.
- If material environmental harm is deemed not to have occurred, any temporary bunds are to be removed and stabilisation undertaken in accordance with Notes for Stabilisation. Operations may then continue on confirmation that the source of the spill / leak has been fixed

### **SELF-AUDITING PROGRAM**

A self-auditing program will be initiated. The Project Manager or Construction Superintendent is to inspect the pipeline daily and maintain a written log of inspections, paying particular attention to the following.

- Ensure barrier fencing is maintained and No Go Areas are being observed by all workers and contractors.
- Ensure sections of trench are not open for longer than 3 days.
- Ensure soil stockpiles are upslope of trench excavation.
- Ensure sediment fencing is installed as illustrated for each pipeline section (refer to ESCP Drawing 2A and 2B).
- Maintain erosion and sediment control measures in their functioning condition for the duration of the excavation works.
- Construct additional erosion and/or sediment control works as become necessary to ensure the desired water control is achieved.
- Ensure soil is returned to the trench in the reverse order to excavation, i.e. subsoil then topsoil.
- Ensure surplus soil and VENM is removed from the Pipeline in an appropriate manner.
- Remove spilled soils or other materials and dispose to safe areas (stockpiles or within landfill cells).
- Identify areas of localised soil erosion and taking appropriate preventative measures. These might include:
  - planting additional stabilising vegetation or wind breaks;
  - stabilising soils with mulches or alternative soil binders:
  - taking steps to minimise any unnecessary concentrated stormwater flow; or
  - installing formalised drainage channels or pipes.
- Ensure any waste materials (such as rocks and debris) are removed from any publicly trafficked road surface as soon as possible.

### MONITORING AND MAINTENANCE

- Erosion and sediment control structures will be inspected weekly and following rainfall to ensure adequate capacity is retained (where applicable) and are not eroding or causing erosion.
- Sediment build-up will be removed from sediment fencing and any drains to ensure adequate function is retained.
- Water bypassing control structures has the potential to cause erosion and increase the likelihood of failure in the next control structure.
- If erosion occurs, it might be necessary to install drainage, reduce any existing drain grades or, where this is not possible, to reinforce existing drains using rock and geotextile.

REV	DATE	BY	APP.	REVISION DETAILS	DRAWING STATUS				
0	04/08/2014	Al	SW	Original	DESIGN BY:	MA	16/04/2020		
1	17/04/2020	MA	SH	Relocation of Pipeline	DRAWN BY	MA	16/04/2020		
2	30/04/20	SH	MA	<b>EME Advisory Comments</b>	FINAL APPROVAL	EB	30/04/2020		

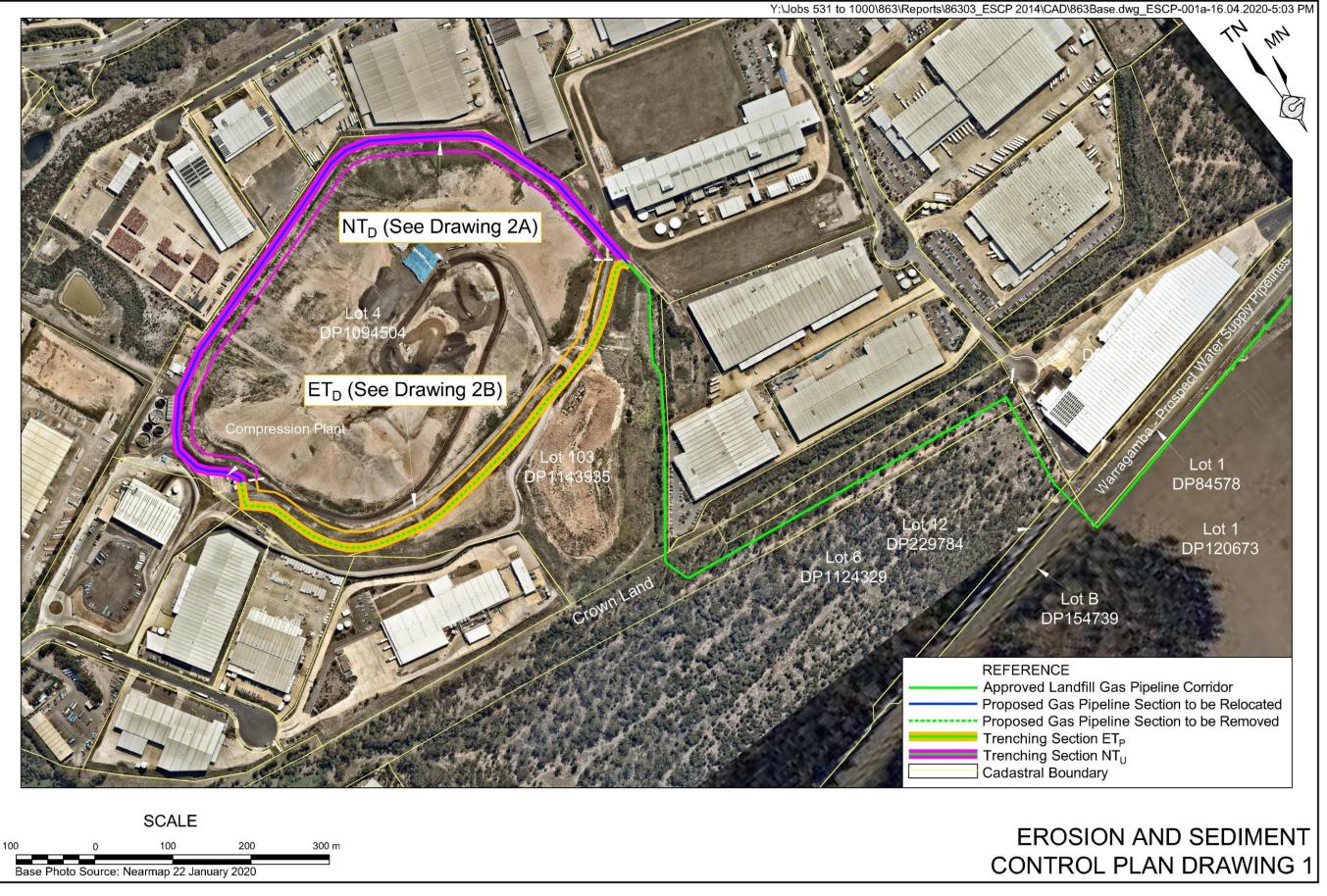
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ERSKINE PARK LANDFILL GAS PIPELINE RELOCATION

EROSION AND SEDIMENT CONTROL PLAN NOTES 2

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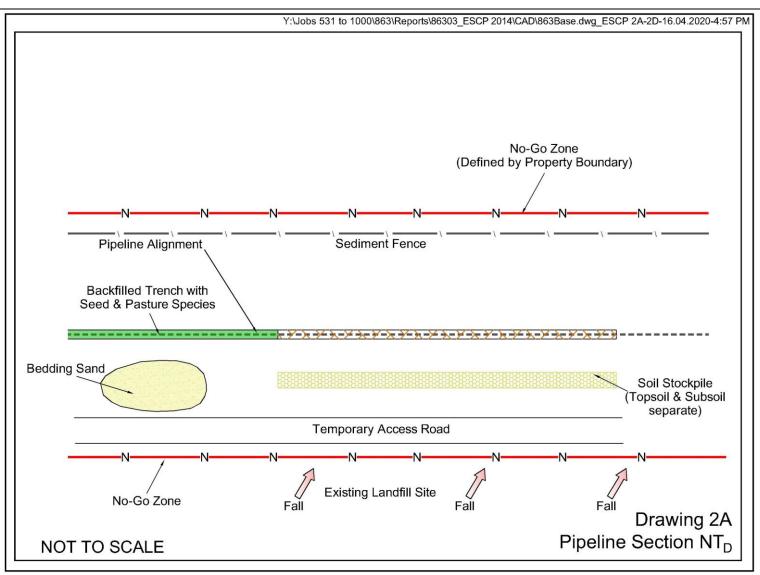
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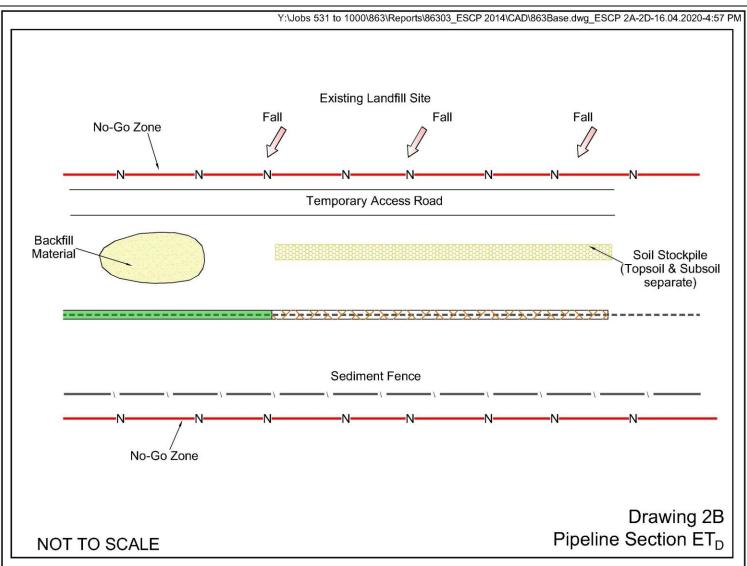


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1	17/04/2020	MA	SH	Relocation of Pipeline	DRAWN BY	MA	16/04/2020	ENVIROGUARD PTY LTD					
2	30/04/20	SH	MA	<b>EME Advisory Comments</b>	FINAL APPROVAL	EB	30/04/2020	ENVIROGUARD FIT LID					
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											863/04	ESCP 03	

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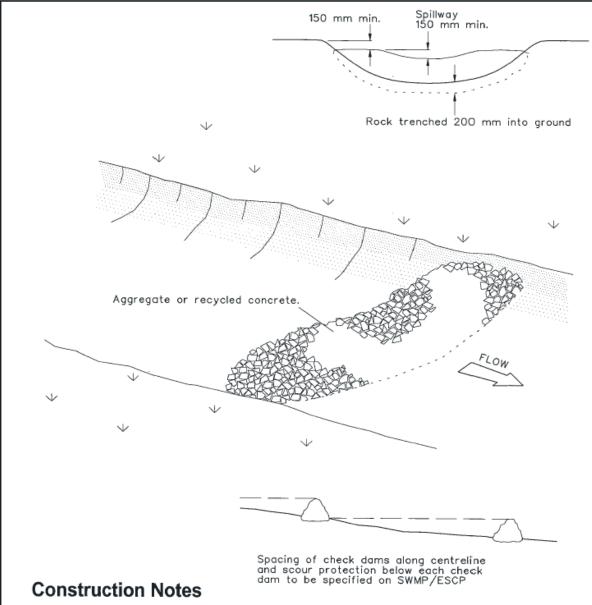
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1	17/04/2020	MA	SH	Relocation of Pipeline	DRAWN BY	MA	16/04/2020		
2	30/04/20	SH	MA	<b>EME Advisory Comments</b>	FINAL APPROVAL	EB	30/04/2020		



ERSKINE PARK LANDFILL GAS PIPELINE RELOCATION

EROSION AND SEDIMENT CONTROL PLAN DRAWING 1

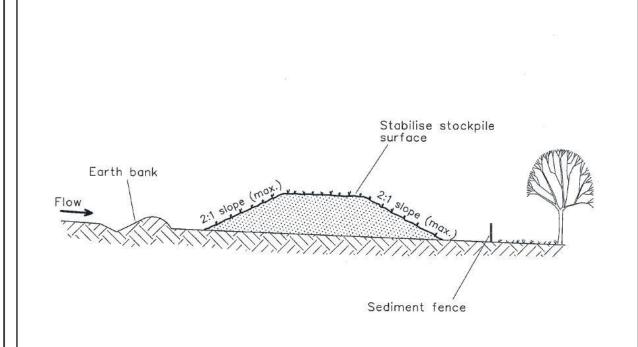
PROJECT NO. SHEET NO. REV 2 863/04 ESCP 04



- Check dams can be built with various materials, including rocks, logs, sandbags and straw bales. The maintenance program should ensure their integrity is retained, especially where constructed with straw bales. In the case of bales, this might require their replacement each two to four months.
- Trench the check dam 200 mm into the ground across its whole width. Where rock is used, fill the trenches to at least 100 mm above the ground surface to reduce the risk of undercutting.
- Normally, their maximum height should not exceed 600 mm above the gully floor. The centre should act as a spillway, being at least 150 mm lower than the outer edges.
- Space the dams so the toe of the upstream dam is level with the spillway of the next downstream dam.

### **ROCK CHECK DAM**

SD 5-4



### **Construction Notes**

- Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
- Construct on the contour as low, flat, elongated mounds.
- Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
- Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
- 5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

**STOCKPILES** 

SD 4-1

REV	DATE	BY	APP.	REVISION DETAILS	DRAWING STATUS		
0	04/08/2014	Al	SW	Original	DESIGN BY:	MA	16/04/2020
1	17/04/2020	MA	SH	Relocation of Pipeline	DRAWN BY	MA	16/04/2020
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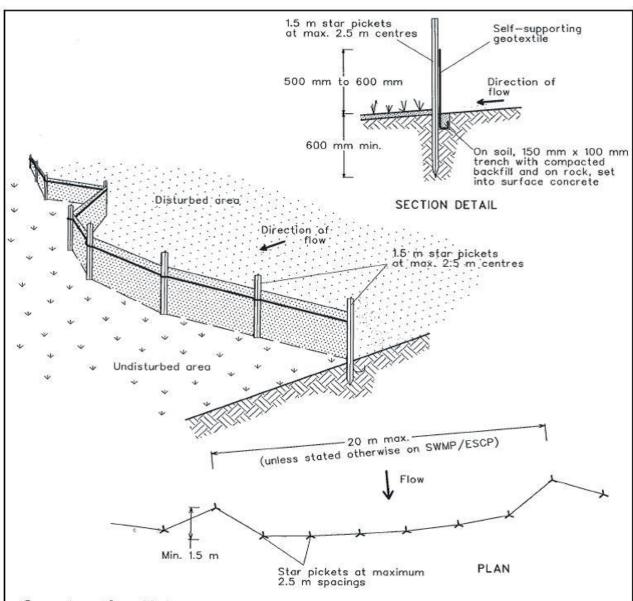
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ERSKINE PARK LANDFILL GAS PIPELINE RELOCATION

EROSION AND SEDIMENT CONTROL PLAN DRAWING 3

PROJECT NO. SHEET NO. REV 2 863/04 ESCP 05

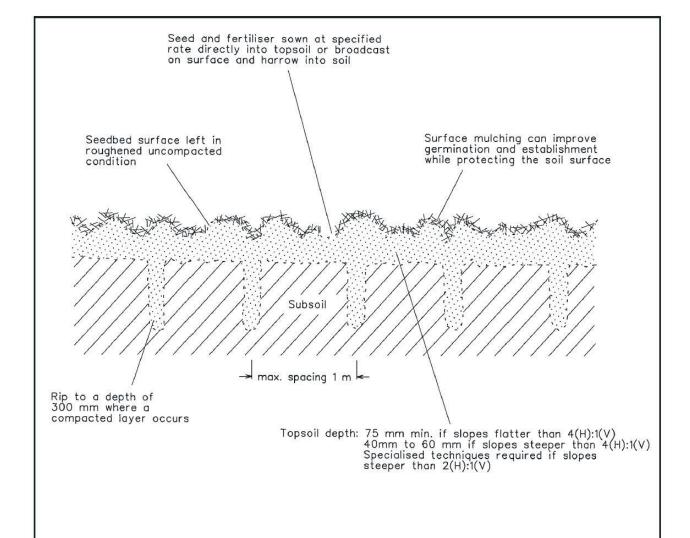


### **Construction Notes**

- Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
- Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
- Drive 1.5 metre long star pickets into ground at 2.5 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
- 4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
- 5. Join sections of fabric at a support post with a 150-mm overlap.
- 6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

### SEDIMENT FENCE

SD 6-8



### **Construction Notes**

- Loosen compacted soil before sowing any seed. If necessary, rip the soil to a depth of 300 mm. Avoid rotary hoe cultivation.
- 2. Work the ground only as much as necessary to achieve the desired tilth and prepare a good seedbed.
- 3. Avoid cultivation in very wet or very dry conditions.
- 4. Cultivate on or close to the contour where possible, not up and down the slope.

### **SEEDBED PREPARATION**

SD 7-1

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1	17/04/2020	MA	SH	Relocation of Pipeline	DRAWN BY	MA	16/04/2020	ENVIROGUARD PTY LTD		GAS PIPELINE RELOCATION	PLAN DRAWING 4		
2	30/04/20	SH	MA	<b>EME Advisory Comments</b>	FINAL APPROVAL	EB	30/04/2020		•				
									R.W. CORKERY & CO. PTY. LIMITED		PROJECT NO.	SHEET NO.	REV 2
											863/04	ESCP 06	