2 July 2019

Sydney, NSW 2021

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Department of Planning and Environment
Attention: Kelly McNicol
320 Pitt Street
Sydney NSW 2000

Southern Waste Recycling Solutions – BDAR waiver

Dear Kelly,

Southern Waste Recycling Solutions (SWRS) has prepared a scoping assessment to inform a request for Planning Secretary's environmental assessment requirements (SEARs) for a State significant development (SSD) application pursuant to Part 4 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act). The SSD application is for a waste disposal, treatment and resource recovery facility (the proposed development) at 15 Carribee Road, Moss Vale, NSW.

Under Section 7.9(2) of the NSW Biodiversity Conservation Act 2016 (BC Act), any SSD application is to be:

> *… accompanied by a biodiversity assessment report unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on the biodiversity values.*

The purpose of this letter is to request the Planning Agency Head and the Environment Agency head to waive the requirement for a Biodiversity Development Assessment Report (BDAR).

The scoping assessment is accompanied by a biodiversity due diligence assessment report prepared by Biosis. The document determines the presence of threatened flora, fauna, populations or ecological communities (biota) within the disturbance area of the proposed development and, where applicable, assesses impacts on any such species or their habitats, listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), the BC Act and the NSW Fisheries Management Act 1994. The assessment has concluded that the proposed development has been developed to avoid impacts to biodiversity values and works would not result in a significant impact to biodiversity. As such, based on the current scope of the development, further assessment of ecological impacts and the preparation of a BDAR is not required. The biodiversity due diligence assessment report has been appended to this BDAR waiver request (see Appendix A).

Based on the information provided in this letter and the scoping assessment we trust this this request to waive the requirement for a BDAR can be supported.

Should you require further information please do not hesitate to contact me.

Yours sincerely

Director, Prime Environmental Consulting

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Appendix A – Biodiversity Assessment

17 June 2019

The Director,
Prime Environmental Consulting

Dear Prime Environmental Consulting,

Re: Biodiversity assessment 15 Carribee Road Moss Vale

Project no. 30101

Biosis Pty Ltd was commissioned by Prime Environmental Consulting (PEC) to complete a biodiversity assessment to describe the biodiversity values and constraints associated with the proposed waste disposal, treatment and resource recovery facility at 15 Carribee Road Moss Vale, New South Wales (NSW). The project will be pursuant to State Significant Development (SSD) in accordance with Section 4.7 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). Under Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act) the application for development consent must be accompanied by a Biodiversity Assessment development Report (BDAR) unless the planning agency head and Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

The objective of this flora and fauna constraints assessment is to:

- Determine the presence of any threatened flora, fauna, populations or ecological communities (biota) within the study area and, where applicable, assess the impacts of the project on any such species or their habitats, listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), NSW *Biodiversity Conservation Act 2017* and NSW *Fisheries Management Act 1994* (FM Act).
- Support a request to waive the requirement for any future assessment (ie. Biodiversity Development Assessment Report) of the project based on current scope of project.

Background

The study area is located approximately 8.1 kilometres northwest of the town of Moss Vale. The study area covers approximately 10 hectares and is defined as Lot 12 DP 527683 (Figure 1). Within the study area, the impact area comprises previously cleared land within the centre of the lot (Figure 2).
The study area is within Wingecarribee Local Government Area (LGA) and is zoned IN1 – General Industrial under the *Wingecarribee Local Environmental Plan 2010* (LEP). The surrounding area includes residential, industrial and agricultural land use with small towns interspersed. Land surrounding the area is predominantly zoned General industrial and E2 Environmental Management under the LEP. Vegetation in the surrounding area is predominantly cleared, with small remnant patches of trees forming a thinly spread band towards the north-west, where larger areas of native vegetation occur along the Wingecarribee River near the town of Berrima. This vegetation continues along the river and connects to large areas of vegetation on private land, Bangadilly National Park and Belanglo State Forest.

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Vegetation within the impact area has been previously cleared and the development footprint is placed to avoid areas of ecological value. This report outlines the ecological features of the study area, demonstrates the avoidance of impacts to these features and therefore avoidance of impacts to threatened biota.

Method

Database and literature review

Prior to completing a field investigation, information provided by PEC as well as other key information was reviewed, including:

- Commonwealth Department of the Environment and Energy (DEE) Protected Matters Search Tool for matters protected by the EPBC Act.
- NSW Office of Environment and Heritage (OEH) BioNet Atlas of NSW Wildlife, for items listed under the BC Act.
- The NSW Department of Primary Industries (DPI) Spatial Data Portal for FM Act listed threatened species, populations and communities
- NSW DPI WeedWise database for *Biosecurity Act 2015* (Biosecurity Act) listed Priority listed weeds for the South East Local Land Services (LLS) area.
- Vegetation mapping:
  - Native vegetation of Southeast NSW: a revised classification and map of the coast and south east tablelands (VIS ID 2230) (Tozer et al. 2010).

The implications for the project were assessed in relation to key biodiversity legislation and policy including:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- *Environmental Planning and Assessment Act 1979* (EP&A Act).
- *Biodiversity Conservation Act 2016* (BC Act).
- *Local Land Services Act 2016* (LLS Act).
- *Biosecurity Act 2015* (Biosecurity Act).

Field investigation

A field investigation of the study area was undertaken on 23 May 2019 by Averill Wilson (Botanist). Vegetation within the study area was surveyed using vegetation plots in accordance with the Biodiversity Assessment Method (BAM) 2017 (State of NSW 2017).

A habitat-based assessment was completed to determine the presence of suitable habitat for threatened species previously recorded (OEH 2019) or predicted to occur (Commonwealth of Australia 2019) within 5 kilometres. This list was filtered according to species descriptions, life history, habitat preference and soil preference to determine those species most likely to be present within the study area.

Results

The study area is located approximately 40 kilometres southwest of Wollongong Central Business District, in an area comprised of a range of land uses including agricultural industry, small-scale agriculture and rural residencies.

Regional soil landscape mapping indicates that the study area occurs on the Moss Vale Highlands Mitchells landscape (Mitchell 2002). The Moss Vale Highlands Mitchell landscape is characterised by rolling hills and rounded peaks with deep channel incision on horizontal Triassic alternating quartz sandstone and shale. The soils are widespread yellow and grey texture-contrast soils, deep yellow earth on friable sandstone often with concretionary ironstone and accumulations of clan quartz sand in valleys.

The study area is covered largely by previously cleared land and one remnant vegetation community. Nine hollow bearing trees occur within the study area, these trees are outside of the impact area and will not be removed by the proposed development. Hollows may provide roosting for threatened microbats or nesting for small parrots.

One first order stream occurs within the study area, the impact area has been designed to avoid impacts to this waterway. The waterway occurs to the north of the impact area, draining to the north towards constructed dams within the surrounding landscape. The waterway is a poorly defined drainage line occurring through a previously cleared, modified landscape and is not considered to contain any threatened species habitat. The impact area occurs up-gradient of this waterway.

Vegetation communities

Prior to the field investigation, Biosis confirmed that various native vegetation communities, including two Threatened Ecological Communities (TECs), have been mapped in the broader landscape (Tozer et al. 2010). The vegetation previously mapped includes:

- *White box Yellow Box Blakelys Red Gum Woodland* (Endangered Ecological Community, BC Act and Critically Endangered EPBC Act)
- *Southern Highlands Shale Woodland in the Sydney Basin Bioregion* (Southern Highlands Shale Woodland) (Endangered Ecological Community, BC Act and Critically Endangered EPBC Act)

A key focus of the field investigation was to assess the vegetation of the study area against the final determinations for the listed TECs, to determine presence or absence.

The vegetation of the study area comprises previously cleared land with exotic pasture grasses (Plate 1) and areas of remnant Southern Highlands Shale Woodland (Figure 2, Plate 2). The structure, floristic composition and condition of this community is described below, associated plates are provided in Appendix 2. No fauna were recorded during field investigation, a list of flora species recorded within the study area is provided in Appendix 3.

A survey of the area of woodland revealed the dominant canopy species to be Narrow-leaved Peppermint *Eucalyptus radiata.* Other canopy species recorded included one Monkey Gum *Eucalyptus cypellocarpa.* Midstorey species were absent across the study area. Ground cover consisted of exotic pasture grasses dominated by Kikuyu *Cenchrus clandestinum*, Paspalum *Paspalum dilatatum* and Phalaris *Phalaris aquatica*. Native grass species in the area was limited to Weeping Meadow Grass *Microlaena stipoides*. This community satisfies conditions for listing under the BC Act for *Southern Highlands Shale Woodland in the Sydney Basin Bioregion* (Endangered Ecological Community) due to occurrence of two characteristic dominant canopy species, location within the Wingecaribee LGA and underlying soil type. The vegetation community does not satisfy conditions for listing under the EPBC Act as the vegetation community does not contain a minimum 30% native perennial understorey layer.

Priority weeds

The Biosecurity Act outlines biosecurity risks and impacts, which in relation to the current assessment includes those risks and impacts associated with weeds. A biosecurity risk is defined as the risk of a biosecurity impact occurring, which for weeds includes the introduction, presence, spread or increase of a pest into or within the state or any part of the state. A pest plant has the potential to out-compete other

organisms for resources, including food, water, nutrients, habitat and sunlight and / or harm or reduce biodiversity.

No Priority Weeds for the South East Region, which includes the Wingecarribee LGA, were recorded in the study area.

Threatened species

Background searches identified 15 threatened flora species and 35 threatened fauna species recorded (OEH 2019) or predicted to occur (Commonwealth of Australia 2019) within 5 kilometres of the study area. Those species considered most likely to have habitat within the study area based on the background research are as follows:

Flora

- Dwarf Kerrawang *Commersonia prostrata* (Endangered, EPBC Act and BC Act)
- Camden Woollybutt *Eucalyptus macarthurii* (Endangered, EPBC Act and BC Act)

Fauna

- Dusky Woodswallow *Artamus cyanopterus cyanopterus* (Vulnerable, BC Act)
- Little Eagle *Hieraaetus morphnoides* (Vulnerable, EPBC Act and BC Act)
- Little Lorikeet *Glossopsitta pusilla* (Vulnerable, BC Act)

Habitat for threatened flora species within the study area is limited due to historic and current disturbance, lack of native vegetation and unsuitable habitat requirements for recorded or predicted to occur threatened species. It is unlikely that Dwarf Kerrawang or Camden Woollybutt occur within the study area as these species are not cryptic in nature and neither were recorded within the study area. Based on the size of the study area and the non-cryptic nature of potential species, the survey effort is considered comprehensive for both flora species. Taking all of these factors into consideration, there is a low likelihood of occurrence for threatened flora species.

Fauna habitat within the study area is limited to remnant canopy species; flowering Eucalyptus trees may provide foraging resources for nomadic fauna including Flying-fox, nectivorous parrots and honeyeaters. Given the sparse nature of remnant canopy species it is considered that the study area is of low quality for arboreal mammals, as the canopy cover is sparse and fauna are likely to have to return to the ground to travel between trees. Hollows within the study area may provide nesting or roosting habitat for small parrots or microbats but do not contain hollows of suitable size for arboreal mammals. All remnant trees including hollow bearing trees occur outside the impact area and will not be removed by the current development.

Based on the size of the study area, the survey effort is considered comprehensive to assess habitat presence for threatened fauna species. Taking all of these factors into consideration, there is a low likelihood of impact for threatened fauna species.

Riparian corridors

One un-named waterway was identified within the study area. The waterway occurs as a shallow grass covered depression within the cleared paddock. In addition, one man-made dam was identified on site, being associated with the first order waterway.

The riparian corridors within the study area have been assessed in relation to the *Water Management Act 2000* (WM Act). DPI Water recommends riparian widths based on watercourse order under the Strahler method. The watercourse within the study area was classified as a first order stream, which requires a

riparian corridor width of 10 metres from the 'top of bank' on either side. The waterway and dam will not be impacted by the proposed development.

The overall condition of the riparian area was determined to be degraded given the lack of vegetative cover of the bank, poorly defined channel and history of disturbance.

Constraints assessment

The ecological constraints within the study area are mapped in Figure 3. These constraints are ranked as high, moderate or low, based on the criteria outlined in Table 1.

Table 1 Ecological constraints in the study area

Constraint	Value	Justification	Recommendations
High	• Low condition Southern Highlands Shale Woodland • Hollow bearing trees	• Community meets BC Act condition. • Provides potential roosting and foraging habitat for threatened fauna species. • Does not provide potential habitat for threatened flora. • Hollow bearing trees provide potential habitat for threatened fauna.	Avoidance of impacts to this vegetation community.
Low	• Exotic grassland	• Does not form part of an ecological community. • Does not contain any hollow bearing trees. • Is unlikely to provide potential habitat for threatened flora or fauna.	Development suitable in these areas.

Impact assessment

The proposed works have been positioned to avoid areas of ecological value. The proposed works involve the following impacts to ecological features:

- Removal/modification of 2.2 hectares of exotic grassland.

Given the small area of the subject site and the current condition of the study area, no threatened biota are considered likely to be impacted by the proposed works and no further assessment is required.

Conclusion and recommendations

The flora and fauna constraints assessment has highlighted a range of values and constraints within the study area. Due to the nature and location of these constraints the following recommendations have been made regarding the impact area for the project:

- Any trees to be retained should be protected in accordance with Australian Standard AS4970 – 2009 Protection of trees on development sites.
- In the unlikely event that unexpected threatened species are identified during the project, works should cease and an ecologist should be contacted for advice
- Appropriate erosion and sediment control measures should be installed at all sites to avoid impacts to surrounding biodiversity values.
- Exclusion fencing to be installed prior to construction to protect and minimise disturbance to surrounding native vegetation.

The subject site has been developed to avoid impacts to biodiversity values and works will not result in a significant impact to biodiversity. As such, further assessment of ecological impacts and preparation of a BDAR is not required.

I trust that this advice is of assistance to you however please contact me if you would like to discuss any elements of this ecological advice further.

Yours sincerely

Sarah Allison

Zoologist

References

Commonwealth of Australia 2019, *Protected Matters Search Tool*, *Australian Government Department of the Environment, Water, Heritage & the Arts, Canberra*, <https://www.environment.gov.au/epbc/protected-matters-search-tool>.

Department of Primary Industries 2019, 'Priority weeds for the Greater Sydney Local Land Services Region'.

Mitchell, P 2002, *NSW (Mitchell) Landscapes*, Department of Environment and Climate Change NSW, Hurstville NSW.

OEH 2019, *BioNet the website for the Atlas of NSW Wildlife*, viewed 5 April 2019, <http://www.bionet.nsw.gov.au/>.

State of NSW 2017, 'Biodiversity Assessment Method'.

Tozer, M et al. 2010, 'Native Vegetation of Southeast NSW: A Revised Classification and Map for the Coast and Eastern Tablelands', *Cunninghamia*, vol. 11, pp. 359–406.

Appendices

Appendix 1 Figures

Legend

- Study area
- Impact area

Acknowledgements: Basemap © Land and Property Information 2016

Figure 1 Study area and impact area

0 20 40 60 80 100

Metres

Scale: 1:2,500 @ A3

Coordinate System: GDA 1994 MGA Zone 56

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Biosis Pty Ltd

Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 30101,
Date: 04 June 2019,
Checked by: SNA, Drawn by: DK, Last edited by: dkazemi
Location:P:\30100s\30101\Mapping
30101_ECO_F1_ProjectArea.mxd

Legend

- Study area
- Impact area
- Hollow bearing trees

Strahler Order

- 1
- 2

Plant Community Type

- Southern Highlands shale woodlands in the Sydney B
- Exotic grassland

Figure 2 Ecological Features

0 20 40 60 80 100

Metres

Scale: 1:2,500 @ A3

Coordinate System: GDA 1994 MGA Zone 56

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Biosis Pty Ltd

Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 30101,
Date: 07 June 2019,
Checked by: SNA, Drawn by: DK, Last edited by: dkazemi
Location:\\bio-data-01\matters$\30100s\30101\Mapping\30101_ECO_F2_Ecofeatures.mxd

Legend

- Study area
- Impact area

Constraints

- Low
- High
- High

Figure 3 Ecological constraints

0 20 40 60 80 100

Metres

Scale: 1:2,500 @ A3

Coordinate System: GDA 1994 MGA Zone 56

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Albury, Ballarat, Melbourne,
Sydney, Newcastle, Wangaratta & Wollongong

Matter: 30101,
Date: 07 June 2019,
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Appendix 2 Plates

Plate 1 Exotic grassland

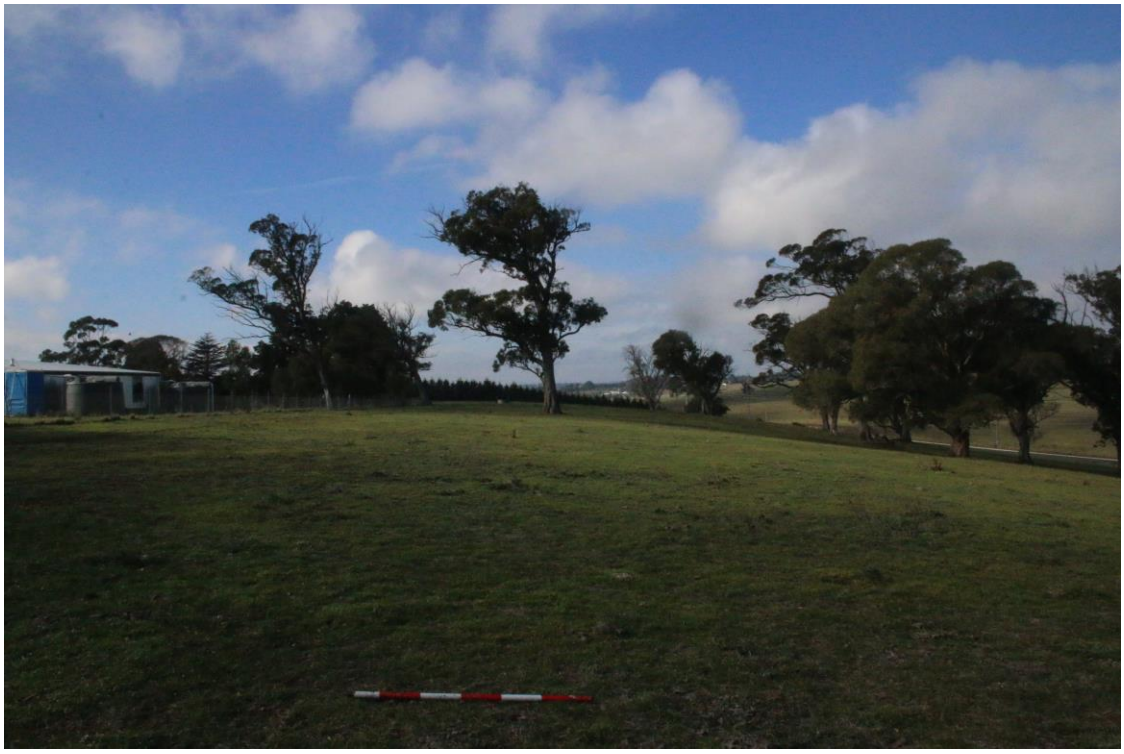

Plate 2 Exotic grassland (foreground) and Southern Highlands Shale Woodland

Appendix 3 Flora

Flora species recorded from the study area

Table A. 1 Flora species recorded by Biosis, 23/05/2019

Status	Scientific name	Common name
Exotic species		
	Trifolium repens	White Clover
	Plantago lanceolata	Lamb's Tongues
	Lepidium africanum	Common Peppercress
	Taraxacum officinale	Dandelion
	Malva sp.	Mallow
	Rumex crispus	Curled Dock
	Paspalum dilatatum	Paspalum
	Cenchrus clandestinum	Kikuyu Grass
	Phalaris aquatica	Phalaris
Native species		
	Microlaena stipoides var. *stipoides*	Weeping Meadow Grass