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Your ref: 1
Our ref: 12648767

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Principal Planning Officer – Industry Assessments
NSW Department of Planning, Housing and Industry
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Woodlawn Eco-Precinct – Scoping for environmental assessment of Significant Development 10_0012 Modification 8

Dear Sheelagh

1. Introduction

Veolia Environmental Services (Australia) Pty Ltd (Veolia) owns and operates the Woodlawn Bioreactor (WBR) as part of the wider Woodlawn Eco-Precinct (WEP), located near Tarago, NSW.

The WBR (formerly known as the Woodlawn Waste Management Facility) was originally approved by the then Minister for Urban Affairs and Planning on 30 November 2000. An application to expand the WBR was approved on 16 March 2012 (SSD 10_0012 – project approval) under Part 3A of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act). The WBR receives up to 1.13 million tonnes per year of putrescible waste for landfilling. The majority of the waste (up to 900,000 tonnes) is received from Sydney via rail, with smaller portions from local councils (up to 130,000 tonnes) and residual waste from the Mechanical Biological Treatment Facility (up to 100,000 tonnes) via road.

The project approval was transitioned to State significant development (SSD) on 14 June 2019 and is now referred to as SSD 10_0012.

Veolia is seeking to modify (SSD 10_0012) to expand the storage capacity for treated leachate by constructing a new tank farm in a greenfield area of the site (to be referred to as 'Tank Farm 2').

The proposed modification (Modification 8) will include:

– Up to eight (8), 13.5 megalitre (ML) tanks to hold treated leachate pumped from the existing approved storage dams and leachate treatment plant (LTP) via pipeline from the proposed tank farm 1 (Modification 6) (inclusive of pump station).
– Earthworks to prepare the proposed area for the tank farm, including install of a bund providing 110% capacity of one of the tanks.

1.1 Purpose

The purpose of this letter is to describe the proposed modification to consent for SSD 10_0012 and provide preliminary information to enable the Department of Planning, Housing and Industry (DPHI) to identify issues to be addressed as part of the modification process. A Modification Report will be prepared with

regard to Appendix E to the 'State significant development guidelines - preparing a modification' (NSW DPE, 2022) to enable DPHI to complete its assessment of the modification application.

1.2 Previous modifications

The existing consent (MP10_0012) has been modified as summarised as in Table 1.

Table 1 Modifications

Modification	Status	Description
Modification 1	Approved 9 September 2016	Changing the site water and leachate management to allow the use of ED2 for the mine void stormwater storage and ED3S for treated leachate storage.
Modification 2	Approved 22 December 2017	Construction of a leachate treatment plant and associated infrastructure and changes to regional waste limits and operating hours
Modification 3	Approved 9 April 2019	Construction and operation of a Solid Recovered Fuel (SRF) Processing Area within the WEP
Modification 4	Approved 16 March 2020	Temporary increase to waste receival rates to receive up to 200,000 cubic metres of bushfire impacted waste material from regional areas of NSW between March and September 2020
Modification 5	Withdrawn	
Modification 6	Response to submissions	Construction and operation of tank farm 1 which provides an additional 52 megalitre capacity for storage of leachate pumped from the existing approved storage dams and leachate treatment plant.
Modification 7	Response to submissions	Construction and operation of a reverse osmosis plant adjacent to the existing leachate treatment plant. Transfer of treated water (permeate) from the plant via pipeline and irrigation of permeate on grazing lands.

1.3 Site context and need

The land surrounding the WBR forms part of the Allianoyonyiga Creek catchment. The creek is located approximately 2.2 km northwest of the site and flows in a westerly direction towards Willeroo Creek which flows into Lake George.

WEP is a zero discharge site that contains all stormwater runoff and leachate generated by the WBR within the site area. The water management strategy is heavily reliant on evaporative losses to reduce store inventory volumes. Stormwater is diverted from the waste where possible to minimise the potential generation of leachate from surface water run on.

Leachate is extracted from the WBR and pumped to the leachate treatment dam for pre-treatment, located at the top of the void. The leachate treatment dam has a capacity of 12 ML. Leachate is then pumped from the leachate treatment dam to the leachate treatment plant. Treated leachate from the leachate treatment plant is transferred to ED1 coffer dam 1 or ED1 coffer dam 2, which both have a high density polyethylene (HDPE) liner. The dams are fitted with assisted evaporation systems to increase evaporative losses. All dams are required to maintain a minimum freeboard of 0.5 metres.

The existing leachate storage dams are nearing capacity with limited available outflows. Unfavourable (wet) weather conditions over the past 4-5 years have accelerated the need for additional storage capacity for treated leachate. To address this, Modifications 6 and 7 have been put forward to increase leachate disposal and short to medium term storage capacity.

An initial short-, medium- and long-term Water and Leachate Management Strategy for Woodlawn Eco-Precinct (Engeny Australia Pty Ltd, 2023) was developed in 2023, which identified that up to 100 ML of additional storage capacity for treated leachate was required to maintain the freeboard in ED1 Coffer Dam 1 and ED1 Coffer Dam 2. Modification 6 proposes approximately 52 ML of storage capacity, which only satisfies part of the target contingency volume required by Veolia. The additional storage capacity provided by the proposed Tank Farm 2 would address the shortfall in storage capacity. It would also provide contingency for additional storage of leachate in adverse weather conditions, allowing continued operation

of the leachate management system. The Water and Leachate Management Strategy was updated by Engeny in December 2024 (Engeny Australia Pty Ltd, 2024) which confirmed that the additional storage provided by Tank Farm 2 would be for:

– Storage of treated leachate from the leachate treatment plant in the short term, until such time as the reverse osmosis plant and irrigation are approved and commissioned (Modification 7)
– Storage of brine from the reverse osmosis plant in the medium to long term

The proposed Tank Farm 2 modification would also minimise the risk of dam freeboard exceedances and potential associated environmental impacts, while providing certainty on contingency storage capacity to account for uncertainties within the modelling by Engeny and variable climatic conditions.

2. Proposed modification

The project will remain generally in accordance with the development described in the Environmental Assessment (MP10-0012) (URS Australia Pty Ltd, 2010). An overview of the key changes to the project described in the EIS is presented in Table 2.

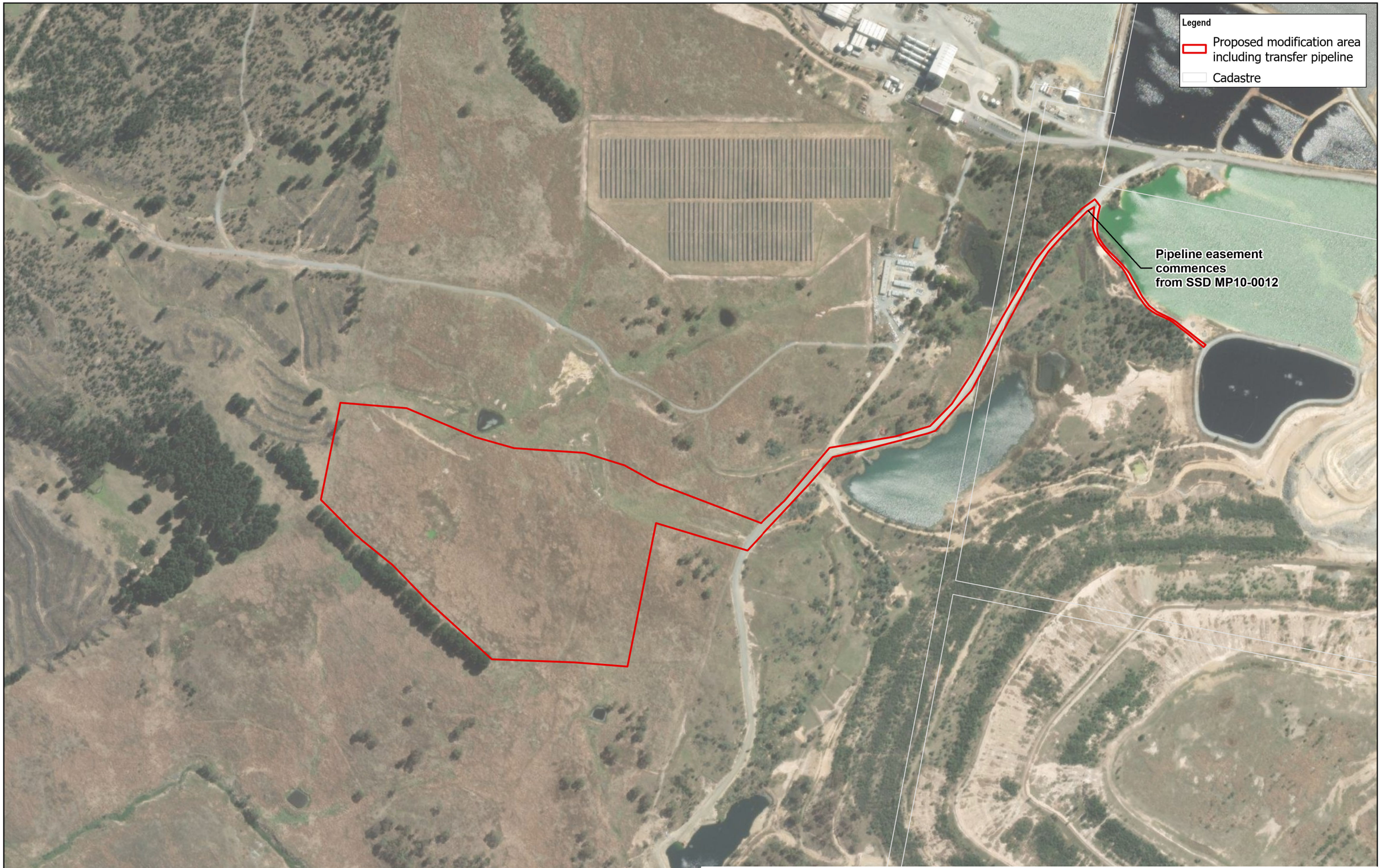
Table 2 Proposed modification

Project as described in the Environmental Assessment	Proposed modification
Leachate management and disposal using biological treatment and evaporative control incorporating natural evaporation and mechanical evaporator blower systems in open lagoons following treatment. The treated leachate storage pond is identified as contingency leachate storage in case of any highly unusual events.	Installation of eight (8) 13.5 ML tanks to provide a total additional contingency leachate storage capacity of approximately 108 ML. Transfer of leachate to and from Tank Farm 2 via pipeline from the proposed Tank Farm 1 (Modification 6). Use of portable pumps for the transfer of leachate and or brine to fill and/or empty the tanks as this is intended to be an infrequent operation. Construction of a downstream bund to contain at least 110% of the total volume of one of the tanks. Tank design comprising: – Steel or concrete construction – Fixed or floating roof with breather to minimise odours and avoid rainfall contribution – Double-lined or double-skinned – Lined base and leak detection system

Tank Farm 2 is proposed to be located in an area of approximately 13.6 ha within the 6,000 ha WEP site southwest of the WBR, as shown in Figure 1. The proposed footprint includes allowance for construction laydown, stockpiling and construction access. Tank Farm 2 would be accessed via existing haul roads.

The following factors were considered selecting the location for Tank Farm 2:

– Avoidance of sensitive areas such as native vegetation patches, based on preliminary advice from the initial biodiversity survey
– Existing and known heritage considerations, including where registered finds nearby were located and based on previous consultation with the Local Aboriginal Land Council (Pejar)
– Proximity to access roads
– Connection to existing and proposed leachate management infrastructure
– A geotechnical study commissioned by Veolia covering the proposed modification area



Data Disclaimer

Paper Size ISO A3

0 20 40 60 80

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 55

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GHD

Veolia Environmental Services (Australia) Pty Ltd
Woodlawn Tank Farm
SSD 10_0012 Modification (MOD 8)

Project No. **12648767**
Revision No. **1**
Date **9/04/2025**

Proposed Modification Area

FIGURE 1

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Print date: 09 Apr 2025 - 11:45

Data source: NSWSS: Cadastre (2024); Roads (2024): GHD: Leachate pipeline corridor (2024): World Imagery: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community. Created by: ehaverkamp

3. Engagement

Key stakeholders for the proposed modification and the approach to engagement with each stakeholder is identified in Table 3.

Table 3 Engagement approach

Stakeholder	Engagement approach
DPHI	Initial briefing sessions with Veolia has or will be undertaken for the proposed modification.
NSW EPA	
Goulburn Mulwaree Council	
Queanbeyan-Palerang Regional Council	A briefing session will be set up to discuss the proposed modification
Local Aboriginal Land Councils	Consultation will be undertaken with Local Aboriginal Land Councils as part of the aboriginal cultural heritage assessment report
Adjacent landowners	The nearest private residence is located approximately 2 km to the south from the proposed Tank Farm 2. A letter will be issued including details of the proposed modification to seek any feedback from nearby residents.
Woodlawn Community Liaison Committee (CLC)	Veolia will discuss the proposed modification in a CLC meeting and outcomes and feedback will be documented in CLC minutes and considered in the modification report.
Community	Veolia will advertise the proposed modification to the local community via an advertisement in the local newspaper – Tarago Times.

4. Environmental assessment

The proposed modification is similar in nature to the Modification 6 application (Element Environment Pty Ltd, 2024) which is currently at the response to submissions stage. Therefore, the following assessment approach has considered the recent environmental assessment requirements to support a modification to SSD 10_0012 under section 4.55(2) of the EP&A Act:

- **Air quality (dust and odour)**: qualitative review of existing site information relevant to odour and existing environment, qualitative construction dust assessment and qualitative operational odour emission review including development of a cumulative odour emissions inventory and estimate of percentage change in odour from the proposed modification.
- **Noise and vibration**: assessment of noise and vibration associated with construction activities including 3D construction noise modelling and predicted noise and vibration levels associated with the proposed modification including construction traffic on the nominated traffic routes.
- **Traffic and access**: assessment of potential traffic impacts of the proposed modification including review of traffic volume and intersection safety data and crash statistics. This will include estimates of traffic generation during construction and assessment of operational performance of the surrounding road network and existing intersections supported by traffic modelling data.
- **Biodiversity**: preparation of a Biodiversity Development Assessment Report (BDAR) in accordance with the relevant guidelines to assess the potential impacts to threatened species, populations and communities and their habitats as a result of the proposed modification. The proposed modification area has been revised by Veolia and sited to avoid areas of biodiversity significance, including mature native trees located to the east.
- **Aboriginal Cultural Heritage**: preparation of an Aboriginal Cultural Heritage Assessment Report that includes consultation with Registered Aboriginal Parties and archaeological survey. Veolia has advised that they have consulted with Pejar when selecting the proposed location for Tank Farm 2.

- **Visual**: visual impact assessment to identify potential visual impacts of the proposed modification. Based on the current elevation of the site, visual impacts are expected to be limited.
- **Contamination**: high-level review of existing contamination information relevant to the proposed modification. Given the proposed modification area is existing grazing land, no further contamination investigation is expected to be required.
- **Groundwater**: high-level groundwater impact review noting that the proposed tank farm will not require significant excavation compared to dam construction and therefore will be constructed above the water table with a leak detection system installed below the tank basal liner.
- **Surface water**: high-level surface water assessment that will provide an overview of how surface water will be managed as part of the modification.

Other lower risk environmental factors will be addressed through qualitative comparison of environmental impacts in comparison to those considered as part of the original consent.

5. Conclusion

The proposed modification is considered to be substantially the same development as the project approved under SSD 10_0012 and likely to involve minimal environmental impact. Provision of additional storage capacity for treated leachate is considered to be essential to ensure the continued effective operation of the leachate management system at the Woodlawn Eco-Precinct.

We would be more than happy to discuss the proposed modification and need for any further assessment to support the application.

Regards

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References

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Engeny Australia Pty Ltd. (2023). *Water and Leachate Management Strategy.* Engeny Australia Pty Ltd.

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