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12th October 2021

Ref: 20100-B

Waste and Emergency Services
Central Coast Council
PO Box 21
GOSFORD NSW 2250

**Re: Further Information
Lot 89 in DP755221, Glenworth Valley
Multi-Purpose Building
Glenworth Valley Outdoor Adventures**

1. INTRODUCTION AND BACKGROUND

A Wastewater Management Plan (WMP) and several amendments have been historically prepared for the On-Site Sewerage Management system (OSSM) for a Multi-Purpose Building on Lot 89 (the Site). Central Coast Council (Council) requested further information in an email dated 7th August 2020. The requested information is transcribed as follows:

The use of the multi-purpose building independent of any other uses on the site has the potential to result in the frequency of usage being increased which will result in additional hydraulic loading on the on-site sewage management system. There is also the potential that the multi-purpose building may be utilised for an event or function at the same time as a festival or event is occurring elsewhere on the property, thus impacting further on the system.

To determine the impacts of this, a wastewater management report will be required to be submitted to Council, post Gateway, which addresses the following:

- The estimated frequency of functions and likely numbers of patrons utilising the function centre, entertainment facility and food and drink premises.*
- The ability of the existing on-site sewage management system to accommodate any additional hydraulic loading.*
- Recommendations for any modifications required to either the treatment or disposal system to accommodate the additional hydraulic loading.*

As discussed, the waste water management report should also address the increased floor area of the multi-purpose building proposed in the Planning Proposal.

A letter dated 28th September 2020 (Ref. 20100-A) addressed the points raised by Council.

Council responded to the September 2020 letter and queried the suitability of an area annotated in **Figure 1** that was nominated for additional application of secondary treated wastewater if required. Council indicates that they were aware of campers and visitors using this area from time to time.

2. ASSESSMENT OF ADDITIONAL LAND APPLICATION AREA

A site meeting was undertaken on 11th October 2021. The attendees were Barton Lawler (Glenworth Valley Outdoor Adventures), Claire Kennedy (Council) and Larry Cook (Wastewater Consultant). The purpose of the meeting was to review the existing On-Site Sewage Management systems that manage wastewater generated from the Function Center (multipurpose building) and administration building and inspect the area nominated for additional wastewater disposal if required.

In summary, in the event that the Glenworth Valley business expands to the point that additional disposal area is required, there is considered to be sufficient additional area available on the Site that complies with the guideline buffer setback distances. An area totalling approximately 2,000 m² is available approximately 370 m south-southwest of the multi-purpose building and 750 m by road. The location of the possible additional land application area is shown in **Figure 1** and in an enlarged Near Maps image in **Figure 2**.

The rationale for the selection of this area for a potential additional Land Application Area is listed as follows:

- The potential Land Application Area is elevated above floodplain by at least 5 to 8 m and underlain by Triassic sedimentary rocks. Previous soil investigations in this area revealed a silty sandy loam to at least 0.70 m in depth which was assessed satisfactory for irrigation.
- The area available for disposal was measured on Near Maps satellite imagery at approximately 2,000 m².
- The ground slopes gently down to the west-southwest .
- The buffer setback distance between the disposal area and Popran Creek to the north is 40 m in a direct line. However, the flow path is greater than 40 m: approximately 120 m. These setback distances satisfy the guideline buffers setback distances in the Environmental Health Protection Guidelines (DLG1998) and AS/NZS 1547:2012 (SAI & NZS 2012).
- The potential Land Application Area is grassed and has excellent solar and wind exposure.
- The potential Land Application Area is presently secured by a post and wire fence along the access track in the east. The remainder of the perimeter of the Land Application Area can be easily secured
- This area is not used for recreation or camping
- The hydraulic head difference between the treatment system near the function center and the potential disposal area is considered manageable. A higher head pump could be installed if required
- The distance between the treatment tanks and the disposal area is approximately 350 m. The main obstacle for installing a delivery pipe is Popran Creek. The creek can be traversed by 'under creek' boring
- Existing water and power are underground in this area.
- The potential additional Land Application Area will be managed to the high standard clearly demonstrated elsewhere on the property

3. CLOSURE

Please do not hesitate to contact Larry Cook on 0428 884645 if you have any questions or you require further information.

For and on Behalf of
Larry Cook Consulting

A handwritten signature in cursive script that reads "Larry Cook".

Larry Cook
Environmental Consultant and Hydrogeologist

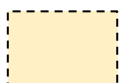
Attachments: Figures 1 and 2

cc: Barton Lawler - Glenworth Valley Outdoor Adventures

FIGURES



Larry Cook Consulting PO Box 8146 Tumbi Umbi NSW 2261 Phone 02 4340 0193	Wastewater Management Plan	Scale: As shown
	Lot 89 in DP755221 Glenworth Valley Glenworth Valley Outdoor Adventures Additional Potential land Application Area	FIGURE 1



Possible Additional LAA



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Wastewater Management Plan
 Lot 89 in DP755221 Glenworth Valley
 Glenworth Valley Outdoor Adventures
 Additional Potential Land Application Area

Scale: As shown

FIGURE 2