

Application details

ABN 85 899 617 894



Application details

Application ID APP011612

Application status Submitted

Application type

Application type New

Permission type Development Licence

Estimated project cost \$10,000,000.00

Permission applicants

Applicant name ADVENTURES VICTORIA PTY LTD

Applicant type Registered company

ABN 41623308789

ACN 623308789

Billing email address accounts@crcoconstruct.com.au

Registered office address
1 Jayco Drive
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Mailing address
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CEO name Gerry Ryan

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CEO contact number	0420743042
Signatory name	Gerry Ryan
Signatory email	accounts@crcoconstruct.com.au
Signatory contact number	0420743042
Key contact name	Hilary Hall
Key contact email	hilaryh@rmcg.com.au
Key contact number	0422608303

Primary Applicant

Primary Applicant ADVENTURES VICTORIA PTY LTD

Suitability to hold a permission

Prohibited person declaration No person or persons are identified as prohibited

I declare all prohibited person declarations have been attached I agree

Fit and proper person declaration

I have attached all necessary information for EPA to perform a Fit and Proper assessment which is I agree

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true and correct to the best of my knowledge

Prescribed permission activities

Scheduled activity	A: Waste treatment, disposal, transport and recycling
Scheduled category	A03 (Sewage treatment)
Description	Onsite wastewater treatment servicing the proposed Lakeshore Caravan Park redevelopment
Is this activity at a fixed or mobile location?	Fixed
Activity location & unstructured address	655 Knowsley-eppalock Road Knowsley 3523

Waste information and treatment codes

Waste code	Amount & unit of waste	Waste form	Disposal category	Treatment code	Description
K210	26.4 Tonnes		-	-	-
K300	100.0 Cubic Metres		-	-	-
K400-H	5000.0 Tonnes	Sludge	-	-	-

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Proposed activity

Process and technology

Summary of the background environmental condition.

The existing site has not been updated significantly since its opening and many of the amenities offered were outdated. Since the closure of the site for redevelopment in 2019, much of the infrastructure has been removed with only the access roads preserved. Furthermore, the land has experienced degradation and erosion due to previous site uses. The existing site thus requires significant investment to attract guests and be commercially viable. Semi-mature and mature trees populate the central area providing some canopy shade and softening the modified ground form. Historically wastewater was disposed at the site by a series of four cascading retention lagoons. The remaining lagoons have been since abandoned. A large area to the northeast of the site has previously functioned as a constructed dirt bike track. This area has a highly modified surface with evidence of erosion, compaction and movement of sediments. Many tyres that previously bounded the track are still present. During rain events, this area has no interception of water and thus stormwater runs off the site and, in heavy rain, can wash sediment through to a neighbouring landholder's site. This has been the cause of several complaints and will be addressed in the proposed redevelopment.

Is this construction or installation of plant or equipment required?

Yes

Describe the required plant or equipment.

As part of the proposed development Lakeshore Caravan Park will purchase and install a new WWTP in the same location where the old wastewater lagoons were located. The Park has sought quotes from vendors for a package-type aerobic wastewater treatment system. Based on a water balance completed as part of the RMCG report Wastewater management for Lakeshore Caravan Park redevelopment, submitted as an attachment, the expected wastewater production volumes and BOD load have been estimated. A conservative approach has been taken, to ensure that the WWTP, winter storage lagoon and recycled water irrigation area are appropriately sized and sufficient space is available for these essential activities. The

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new WWTP will be supplied by a specialist vendor. Performance details and budget estimates from four vendors have been sought however a vendor has not yet been selected. In particular, the selected WWTP will be required to meet the nutrient limits for the recycled water, as these dictate the area required for sustainable irrigation. Recycled water has been limited to areas without native vegetation and located well away from the lake edge, in areas sloping to the north (i.e. outside the lake catchment area). The WWTP will be a high-rate, biological treatment system with full automation and process control. The WWTP will include screening, primary sedimentation and biological treatment for the reduction of carbonaceous material and nitrogen. The aerobic treatment tanks which will provide the biological treatment is most likely going to comprise of a sequencing batch reactor (SBR). The SBR will have intermittent periods of aeration and settling.

Describe the processes or systems you will develop to perform the activity.

A Health and Environment Management Plan (HEMP) for the recycled water scheme, has been drafted and included as an attachment. This will be updated once a development licence has been granted and the detailed design is complete. It includes a detailed risk assessment and environmental management and monitoring practices. An Environmental Management Plan (EMP), detailing the environmental risk and management activities required for the whole site, including management of stormwater, the wastewater treatment plant, odours, solid waste, etc. will also be developed following project approval.

Is this a new activity or a modification to an existing activity?

New activity

Outline your experience and competency in performing this activity.

The project team working on behalf of the proponents include specialist consultants and developers. These include: ① Planning specialists – to inform the development of the site, areas permitted for development, liaise with the City of Greater Bendigo and prepare the planning application for the proposed development. ② Native vegetation and biodiversity specialists – to undertake a detailed biodiversity study of the entire site, inform the development of the site, determine native vegetation loss and liaise with DELWP on the plans for the proposed development. ③ Wastewater and recycled water specialists – to analyse the wastewater production for the proposed development, determine the processing capacity and

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recycled water quality needs for the WWTP, determine how recycled water can be beneficially used on the site without impact to native vegetation areas, liaise with WWTP vendors to identify suitable infrastructure. ② Landscape architect – to develop a schematic landscape plan that will protect and enhance the existing vegetation, biodiversity and lake water quality while providing functional and attractive recreation and amenity. Staff involved with the design of the proposed development have extensive experience in developing and managing caravan parks with a wide variety of set ups, accommodation options and wastewater treatment facilities. This has included onsite septic tanks, small-scale treatment plants and connections to reticulated sewer. The proponent of the Lakeshore Caravan Park development previously redeveloped the Nagambie Lakes Leisure Park. They have applied their extensive experience and learnings from this development to the proposed Lakeshore development.

Is the proposed activity a research, development or demonstration activity as part of a Pilot Project?

No

Summarise the scale, dimension, purpose and duration of the activity.

-

Summary of measures used to comply with the general environmental duty.

Use of recycled water at the site for sub-surface irrigation will be undertaken as per the Recycled Water HEMP. The HEMP includes WWTP monitoring to ensure recycled water meets the necessary quality requirements for the irrigation scheme. The WWTP will be maintained according to the operational and maintenance advice provided by the vendor. The Lakeshore Caravan Park will have an Environmental Management Plan (EMP) detailing the risk assessment for environmental and human health risks on the site. The irrigation of recycled water will be managed in accordance with the Recycled Water HEMP (a draft of this is included as an attachment to the DL application). Lakeshore Caravan Park is committed to achieving compliance with all facets of Environment Protection Authority (EPA) regulations and the General Environmental Duty. Sewerage will be produced on site and could impact on the environment and human health. Wastewater treatment and recycled water irrigation will occur on-site. Sludge produced from the WWTP will be trucked to a nearby Coliban Water municipal

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treatment plant. Specific procedures will be developed to provide instruction to staff that manage these streams.

Summary of measures considered as best available techniques or technologies.

The new WWTP will be supplied by a specialist vendor. Performance details and budget estimates from four vendors have been sought however a vendor has not yet been selected. In particular, the selected WWTP will be required to meet the nutrient limits for the recycled water, as these dictate the area required for sustainable irrigation. Recycled water has been limited to areas without native vegetation and located well away from the lake edge, in areas sloping to the north (i.e. outside the lake catchment area). Other options for recycled water use considered were evaporation basins and off-site irrigation, neither of which are suitable for this location.

Summary of greenhouse gas emissions generated from this activity.

Scope 1 - Fuel consumption of trucks transporting sludge
Scope 2 - Energy consumption – purchased power from grid for wastewater treatment plant and irrigation pumps and for the cabins, restaurant and other powered sites. Total estimated - 485 tonnes CO₂e per year

Summary of systems and processes to prevent or minimise greenhouse gas emissions.

Energy efficient fittings and fixtures to be installed throughout the site.

Summary of potential impacts from climate change on the activity and related adaptation methods.

The Park's greatest exposure to climate change is the likelihood of weather pattern changes. This may lead to new vulnerabilities, as guests may turn to more 'weatherproof' destinations, book accommodation at shorter notice, cancel their stay or switch destinations if the weather is too hot, too cold or there is likelihood of rain. Risks are greater for rural accommodation since cities or towns offer alternative weather-independent activities. However, caravan parks are a feature of Australian culture and a place that is accessible and affordable for people to access nature. This makes it the preferred regional stay for many tourists. Recycled water use for onsite irrigation will aid with provision of recreational opportunities that are an alternative to lake-based recreation in dry conditions. The wastewater treatment plant is not expected to

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be exposed directly by the potential impacts of climate change. The IPCC describes hazard, exposure and vulnerability as key factors which combine to create risk associated with climate change.

Waste

Summary of how waste is managed in line with the waste management hierarchy.

Waste from the proposed development is expected to be minimal and will be mainly solid waste produced by the restaurant, cabin and offices as well as sludge from the WWTP.

Detail the systems and processes used to minimise risks of harm to human health and the environment from the handling, storage, use and transportation of substance.

Solid waste will be recycled where possible and disposed to landfill otherwise. Food waste and other organic waste from the site will either be composted onsite or sent to an offsite composting facility. This will be determined during detailed design. Consideration will be given to nutrient management on the site, as the site will have limited use for nutrient-containing compost. Green waste will be removed from the site and sent to an offsite composting facility to ensure nutrient management in recycled water irrigation areas. Sludge will be removed in licenced tankers to the Bendigo WRP. As a reportable priority waste, transportation and transactions of this waste will need to be recorded using EPA's Waste Tracker system.

Risk Assessment

Human health and environment

Summary of the risk assessment identifying risks to human health and the environment.

The site has been degraded in the last 50 years, to a state where in certain parts of the site the visual amenity has been affected. Due to modernisation and increased competition in the tourism industry Lakeshore Caravan Park is due for a renovation to fulfill customer expectations and provide higher value for money for its guests. This will at the same time enhance the environmental outcomes of the site and the Park is expecting to reduce environmental and human health risk by: ② Rehabilitating currently degraded areas through revegetation and use of recycled water irrigation. ② Using recycled water for beneficial use. ② Irrigating with recycled water in areas where there is no risk of runoff to Lake Eppalock. ② Using a wastewater treatment process that is considered best practice for

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residential/commercial waste of this scale. ☺ The wastewater treatment will have flexibility to accommodate fluctuating flows according to the tourism season and thus reduce the energy and inputs required. ☺ Using sub-surface irrigation to prevent contact with Caravan Park guests. ☺ Fencing of wastewater treatment and storage infrastructure to prevent guest access.

Summary of how identified risks are eliminated or reduced as far as reasonably practicable.

Adventures Victoria are aware of the environmental and human health risks and, along with their own management practices, utilise expert advice to manage these risks. The onsite wastewater treatment plant and recycled water infrastructure (including associated landscaping) will be installed and operated by trained staff. Further information on the control measures for identified risks is provided in the attachments.

Environmental management

Summary of environmental management systems used to prevent or minimise impact on the environment.

A Health and Environment Management Plan (HEMP) for the recycled water scheme, has been drafted and included as an attachment. This will be updated once a development licence has been granted and the detailed design is complete. It includes a detailed risk assessment and environmental management and monitoring practices. An Environmental Management Plan (EMP), detailing the environmental risk and management activities required for the whole site, including management of stormwater, the wastewater treatment plant, odours, solid waste, etc. will also be developed following project approval.

Will you undertake an environmental audit related to the activity?

No

Summary of environmental auditing requirements and implementation approach.

-

Summary of post-closure plans, including aftercare management, decommissioning and rehabilitation.

When decommissioning of the site is eventually required, tasks that are expected to be completed include: ☺ Mechanical and electrical equipment decommissioning –

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mechanical equipment will be removed and recycled where possible. ☹ Concrete, brick and building material – tanks, paths, buildings and structural elements will be broken up and removed for off-site recycling. The required documentation and Council permission will be sought when required.

Risk management

Air

Summary of the activity's emissions to air.

The air emissions from the proposed redevelopment relate to odour and noise only. No particulates are expected to be generated.

Summary of the systems and processes to prevent or minimise impacts from air emissions.

Please refer to the odour and noise response in the application for further details of these impacts.

Noise

Summary of the activity's noise emissions.

The air emissions from the proposed redevelopment relate to odour and noise only. No particulates are expected to be generated.

Summary of the systems and processes to prevent or minimise impacts from noise emissions.

Quiet times for the Park will be 10pm to 8am every day. ▪ "Buy quiet" equipment purchasing policy ▪ Mechanical equipment to be housed in acoustic enclosures ▪ The truck loading area will be designed so there is minimal manoeuvring required ▪ Trucks will be loaded during the daytime only

Water

Summary of the activity's emissions to surface waters.

The development is not expected to have recycled water emissions to surface water as the irrigation areas are outside of the catchment area of Lake Eppalock.

Summary of the systems and processes to prevent or minimise impacts to surface water.

- Vegetation will slow down the runoff water and provide some natural treatment ▪ Minimised asphalts and other non-permeable materials ▪ No recycled water irrigation

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within the lake catchment area ▪ Bins will have lids to prevent litter from being blown away ▪ Guests will be discouraged to litter the site using signs ▪ Litter will be collected by the Park's staff daily ▪ Lagoons are placed outside of the Lake Eppalock catchment ▪ Water balance modelling undertaken to ensure storages are appropriately sized ▪ Levels will be monitored to prevent overflow ▪ No recycled water irrigation within the lake catchment area ▪

Subsurface drip irrigation will be used and this can be controlled to prevent irrigation runoff by applying water so that the soil is not filled to saturation point ▪ A nutrient balance will be maintained for the recycled water irrigation area to prevent risk of harm to rainfall runoff. Further details are provided in the attached HEMP ▪ Use of permeable surfaces for maximum infiltration of stormwater ▪ Devices such as grassed swales, planted swales, and rain gardens utilise natural microbial activity within the soil/vegetation interfaces to allow further treatment of water and infiltration to the soil. Grassed and planted swales are designed to convey water. Rain gardens allow for temporary detention of water, further reducing the impact of the peak flow of rain events

Land and groundwater

Summary of the activity's emissions to land or groundwater.

② Removal of vegetation will be avoided wherever possible and adverse effects to remaining vegetation will be minimised. Where approved removal of vegetation cannot be avoided, biodiversity will be compensated through offsets. ② Recycled water will only be applied via sub-surface irrigation to grassed areas within the proposed recreation park and amenity buffer. A nutrient balance will be maintained to prevent nutrient migration to native vegetation areas. ② Walkways will keep guests from walking in native vegetated areas and thus reduce compaction and damage. On-site recycled water irrigation will provide the site with the water to rehabilitate degraded land.

Summary of the systems and processes to prevent or minimise impacts to land and groundwater.

Please refer to the draft Recycled Water HEMP for the control measures.

Odour

Summary of the activity's emissions of odour.

The main potential source of odour (prior to controls) at the site are: ② Wastewater treatment plant inlet ② Trucks removing sludge ② Upset conditions (e.g. loss of aeration, overloading).

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Summary of the systems and processes to prevent or minimise impacts from odour emissions.

▪ Fully enclosed WWTP units ▪ Maintaining positive dissolved oxygen (DO) levels through mechanical aeration ▪ Continuously monitoring DO levels ▪ Anoxic periods will still have chemical oxygen available and not be aerobic ▪ Sludge storage tank vented to biofilter odour control unit ▪ Sludge storage time will be minimised ▪ The tank will be mechanically aerated for mixing and oxygenation ▪ Regular cleaning of the sludge tank It is the best interest of the Park that odour is minimised since the amenity of the guests depends on this.

Waste

Does your activity include management or control of industrial waste, priority waste and/or reportable priority waste?

Yes - wastewater sludge K400 - H

Detail the type, quantity and treatment of waste.

The volume of sludge that will be produced is primarily dependent on the occupancy rate and the wastewater treatment technology selected. Sludge will be removed in licenced tankers to the Bendigo WRP. As a reportable priority waste, transportation and transactions of this waste will need to be recorded using EPA's Waste Tracker system.

Is this proposed activity included in a relevant schedule of Regional Waste and Resource Recovery Implementation Plan?

No

Human health

Summary of the activity's potential human health impacts.

Please refer to the draft HEMP

Summary of the systems and processes to prevent or minimise impacts to human health.

Please refer to the draft HEMP

Community engagement

Have you engaged with the community and other third parties regarding this activity?

Yes

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Summarise any planned or completed consultation, as well as concerns raised and the approach to address them.

Please refer to the engagement plan and engagement register.

Additional details

EPA permissions and compliance

Have you ever held a permission from EPA for this activity at the same location?

No

List the permission numbers for all previously held permissions.

-

Do you currently hold a permission or authorisation from EPA for this activity at the same location?

No

List the permission numbers for all currently held permissions and authorisations.

-

Do you currently hold an exemption for this activity at the same location?

No

List the permission numbers for all currently held exemptions.

-

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Detail any engagement with other regulatory authorities, other than EPA, related to this activity.

A separate planning permit application was lodged with the City of Greater Bendigo (December 2021), in parallel with this Development Licence application. DELWP, CFA, GMW CMA and Coliban Water have all been consulted on the project.

Do you require any other planning permits or other approvals for this activity?

Yes

Do you currently hold a planning permit or any other approval for this activity?

No

Detail any planning permits or other approval held for this activity.

-

Have you received any notices from EPA related to this location or activity?

No

List the notice numbers for all notices issued by EPA.

-

Other approvals

Do you require a proof of performance (commissioning) testing plan in relation to this activity?

No

Summarise the proof of performance testing plan for this activity.

-

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Do you require financial assurance for this activity at this location?

No

Summarise the proposed amount and type of financial assurance.

-

Summarise the profitability of the activity, investment at the site and likelihood of the site being abandoned.

-

Summarise the nature and costs of clean up for the activity.

-

Supporting Evidence

Attachments

- F1017 Adventures Victoria.pdf
- F1018 Adventures Victoria.pdf
- Lake Eppalock Information Flyer.pdf
- Lakeshore online engagement session.pdf

Declarations

I declare that I have made all necessary enquiries and the information provided in this application (including any attachments) is true and correct. I understand that it is an offence to intentionally or negligently provide incorrect or misleading information to the Environment Protection Authority or to conceal information from the Authority.

I agree

I declare that I will perform my activity in accordance to the general environment duty.

I agree

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I declare that I will perform my activity to ensure that all substances are handled, stored, used or transported in a manner that minimises risks of harm to human health and the environment from pollution and waste.

I agree