

Works Approval Application - Portland Medical



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Section 1 General Information

1. Primary information

1.1 Company legal entity

Veolia Environmental Services is the occupier of the site relating to this works approval located at 10 George Street, Portland VIC 3305. A works approval application company legal entity form has been completed and is attached in Appendix 1.

1.2 Application fee

The application fee is the greater of 1% of the estimated cost required to carry out the works or 81.83 fee units. For 2019-2020 the value of one fee unit is \$14.81 as per Victoria Government Gazette No. G 14 dated 4 April 2019. 81.83 fee units is \$1,211.90 which is greater than \$350, 1% of the estimated cost of the works. Therefore the fee to accompany this application is \$1,211.90. Please advise the service order number so that payment for this application can be made via credit card.

2. Land use

2.1 Planning and other approvals

The site currently operates as a depot in the Glenelg Shire Council (Council) under planning permit TP102/02. Council has advised Veolia that to install a container on site to store medical waste, a new planning permit is required under a transfer station classification. A planning permit application was submitted to Council on 01 May 2020. The planning department can be contacted on 5522 2187 or planning@glenelg.vic.gov.au.

3. Track record

The site operates as a depot, its environmental track record over the past three years is as follows:

- There has been no community concerns or public feedback;
- There have been no enforcement actions, written warnings, penalty infringement notices or prosecutions received from EPA;
- Controls are in place at the site to mitigate dust such as speed limits and application of binding agents to the yard to prevent fugitive dust emissions.
- The addition of the container is not expected to increase truck movements as only one delivery of medical waste per day is expected and a pick up of medical waste is expected every two weeks.

4. Community engagement

There has been no progression of community engagement at the site since the lodgement of the Approvals Proposal Pathway Form.

5. Process and integrated environmental assessment

5.1 Existing Operation

The Veolia VIC Portland Facility is a small depot and operation that conducts hygiene waste collection services and washroom services for clients in the South Western part of Victoria and Western part of South Australia.

Veolia also undertakes medical waste collection in the region. Currently, trucks are dispatched from the Portland depot to conduct medical waste collection in and around the region. The waste is transported back to Corio for disposal at Veolia's Corio licensed Medical Treatment Facility (EPA Licence 10414). Portland is situated approximately 295km west of Corio. Long haulage incurs high costs due to labour, fuel and transportation costs including increased repair and maintenance. Additionally, it poses safety risks to drivers.

The depot accommodates 3 full time employees and 2 vehicles. Activities on site comprise:

- Truck depot;
- Storage shed;
- Lunch room;
- Small administration office;

The site operates between 8:00am to 5:00pm Monday to Friday. A site plan of existing conditions is attached in Appendix 2.

5.2 Description of the proposal

Veolia is looking to consolidate medical waste collected over two weeks at the Portland Depot and then bulk haul the waste to Corio Medical treatment facility once every two weeks. This will provide stronger capabilities to service the healthcare sector in regional areas with greater efficiencies and customer service levels. This can be especially helpful in cases of emergencies such as containment of disease outbreaks where waste needs to be removed from client premises quickly.

The installation of a 20ft refrigerated bunded storage container is proposed for the Portland depot site. Medical waste collected in 120L, 240L and 660L bins from Portland and surrounding regions will be stored temporarily in a 20ft self bunded refrigerated container to allow for bulk haulage to Veolia's licensed existing medical waste treatment plant in Corio. Appendix 3 shows the design requirements of the bund as per EPA Publication 1698: Liquid storage and handling guidelines versus the actual bund dimensions of the container. The design requirements are exceeded by the actual bund capacity.

The proposed location of the containers is cited in the Proposed Site Layout Plan attached in Appendix 4.

Waste codes intended for storage include:

- R100 - Clinical and related wastes, NOS (biomedical waste);
- R120 - Waste from the use of pharmaceutical products, NOS;
- R130 - Cytotoxic substances

It is estimated that approximately 45 tonnes of waste will be accepted at the site annually. One delivery of bins is expected per day with a pick up of bins approximately every 2 weeks for transport to Corio. Wastes are collected from the healthcare sector from facilities such as medical centres, veterinarian clinics, dentists and pathologies.

Waste will arrive at the site in 120L, 240L and 660L medical waste bins. These bins will be wheeled in by hand (with appropriate PPE worn) and stored within the 20ft self-bunded container. The bunding will be engineered in accordance with EPA Publication 1698: Liquid storage and handling guidelines. While the containers have a gross holding capacity of 30m³ each, the maximum net volume of medical wastes bins that can be stored will not exceed 7.02m³ as per the calculation below. The calculation is based on the best utilisation of floor space in order to maximise volume.

Calculation for maximum volume in the container:

- 3 x 660L bins = 1980L
- 16 x 240L bins = 3840L
- 10 x 120L bins = 1200L

TOTAL volume = 7020L = 7.02m³.

Appendix 5 shows examples of bins stored within the 20ft container. Appendix 6 shows the container layout.

The nearest sensitive receptors to the site is residences located to the west of the site with the closest located 170m away. Refer to the plan of sensitive receptors attached in Appendix 7.

5.3 Process and technology

Waste is not treated at the site but only stored in the container for approximately 2 weeks before being transported to Corio. See attached process flow diagrams of delivery and pick up of bins in Appendix 8.

5.5 Choice of process and technology

Refrigerated containers were chosen to control odour in the warmer months of the year. In addition ensuring the bins are stored in a sealed container is an odour mitigation strategy. The containers are also fully bunded so that the risks to stormwater and land are minimised from the storage of this waste. This has been used at the Shepparton liquid treatment plant with success for the past four years. Veolia has not received any complaints at Shepparton due to odour or noise from the container being stored onsite with bins of medical waste inside. Veolia is also in the process of commissioning two refrigerated containers at the Cohuna depot.

5.6 Integrated environmental assessment

Risks such as odour, noise and dust generation may be increased however they will be managed via the following controls.

Odour:

- Waste will be contained in bins which will be stored in a sealed container;
- The container will be refrigerated in hot months during the day;
- The container will only be opened once a day (weekdays only) for delivery of bins and a maximum of twice per day if a pick up of bins is scheduled for that day (once per fortnight);
- In case of breakdown of refrigerator, until it is repaired more frequent trips will be made to remove bins from container if required in the hotter months;
- Regular inspections of the site boundary for odour will be conducted;

Noise:

- Refrigerator will be turned on from 8am to 5pm (daytime) on weekdays only during hot days;
- The site is located in an industrial area . The closest resident is 170m to the West of the site and shielded by buildings from the noise source.
- Regular preventative maintenance of the refrigerated component of the container will be carried out as per manufacturer instructions.

Dust:

- Speed limit on site is 10km/hr;
- Use of sealant on unsealed areas of the site to minimise dust generation;
- Minimal traffic on site - truck leaves in morning and returns in afternoon Monday to Friday.
- Regular inspections of site boundaries for dust will be conducted.

The risk to stormwater in case of a spill will be managed as follows:

- The waste is contained in bins and the bins will be stored in a self bunded container. The calculated bund volume exceeds the volume of the largest bin by more than 110%.
- A spill kit will be located adjacent to container in case of a spill during unloading/loading of the container;
- Trucks will back up to container location so bins are only out of container for a minimal amount of time
- Regular inspections of stormwater drains will be conducted.

Environmental risks and controls are summarised in the environmental risk assessment attached in Appendix 9.

Section 2 Environmental Information

6. Energy use and greenhouse gas emissions

6.1 General Information (< 10 TJ/yr)

Annually the current operations at the Portland depot use approximately 1866kwh which converts to 0.007TJ. Refrigerating a container for 9 hours per day, 5 days per week from November to March each year (worst case), based on average energy usage for that type of container is approximately 3500kWh which converts to 0.013TJ. The total annual energy consumption for the site with the container installed is estimated to be 5366kwh or 0.02TJ. The site will consume less than 10TJ per year. Energy related greenhouse gas emissions for the site due to energy consumption are estimated to be 5.74t of CO_{2-e}.

7. Water use

7.1 General Information (< 10 ML/yr)

The installation of the storage container at the site is not expected to affect water consumption. Current operations at the site consume approximately 5kl of water annually.

8. Air emissions

The containers do not emit any exhaust and have no discharge to air. Therefore there are no air emissions associated with this proposed operation for the Portland depot.

9. Noise emissions

9.1 General noise impact assessment

The manufacturer's specification states that the refrigerator does not exceed 78dB(A) 1.5m in front and 1.2m above the lower corner castings of the unit. The nearest sensitive receptor is located 170m west from the proposed location and any noise associated with the container is not expected to be audible to them.

Recent noise modelling conducted for a similar operation at Cohuna showed that to operate two refrigerated containers identical to the one proposed for Portland Medical, noise levels at nearby residents would comply with day, evening and night time noise limits of the SEPP N-1. The residents were all located closer than 170m, the closest being 64m. This noise modelling assessment is provided in Appendix 10.

Based on this modelling it is not expected that the noise will be audible to closest residents located 170m away due to shielding of the container by buildings and the fact that only one container is being installed on site.

10. Water

No contaminated stormwater will be generated as a result of the storage of medical waste at the site as the bins will be contained in a sealed fully bunded container. Any spills resulting from unloading or loading the container are addressed in the Environmental Risk Assessment attached in Appendix 9.

11. Land and groundwater

The proposed works will not involve any of the following:

- Underground storage of petroleum;
- Pipeline transfer of petroleum;
- Groundwater extraction or
- Injection of waste to groundwater.

12. Waste

12.2 Prescribed industrial waste (PIW) generation

No PIW will be generated at the site as no waste is treated, it will only be consolidated for disposal to the EPA licenced Corio medical waste facility every two weeks.

12.3 Waste handling and treatment premises

12.3.2 Proposed operation

12.3.2.1 Industrial waste/ PIW received

Table 1 below shows the waste that will be received at the site.

Table 1: PIW to be received at the site.

Source	Type of waste	Volume t/yr or kL/yr	Hazard category	Packaging types
Healthcare Sector	R100 - Clinical and related wastes, NOS (biomedical waste)	41 tonnes per annum approx.	Category A	II
Healthcare Sector	R120 - Waste from the use of pharmaceutical products, NOS	2 tonnes per annum approx.	Category A	I
Healthcare Sector	R130 - Cytotoxic substances	2 tonnes per annum approx.	Category A	-

The following records will be kept relating to this operation:

- Waste transport certificates will accompany each route;

- Unique bin tracking numbers on every bin are used to determine where the waste was generated (client site);
- Driver log books are used for fatigue management;
- Vehicle log books document pre start checks and maintenance required on the vehicle;
- Driver “Prescribed industrial waste” certification; and
- Vehicle EPA permits to transport PIW.

A proposed site layout plan is included in Appendix 4.

12.3.2.2 Industrial wastes/ PIW handling

Waste will arrive at the site in 120L, 240L and 660L medical waste bins. These bins will be wheeled in by hand (with appropriate PPE worn) and stored within the 20ft self-bunded container.

One truck per day will reverse up to the shipping container and unload off the truck directly into the shipping container with full bins. Approximately every two weeks a heavy rigid truck will collect the consolidated load to transport to the EPA licenced facility in Corio for treatment and disposal of the waste.

Proposed site layout plan and design and drawing of the loading/ unloading area are attached in Appendix 4 and 11 respectively.

12.3.2.3 Industrial waste/ PIW treatment

No PIW will be treated onsite, the waste will only be stored on site for consolidation purposes then removed approximately once every two weeks to the EPA licenced facility in Corio for treatment and disposal.

12.3.2.4 Industrial waste/ PIW final destination

Table 2 below summarises the final destination for the PIW received on site.

Table 2: PIW final destination.

Type of waste	Volume t/yr or kL/yr	Hazard category	Destination for reuse, treatment or disposal
R100 - Clinical and related wastes, NOS (biomedical waste)	41 tonnes per annum approx.	Category A	Veolia - Corio treatment plant

R120 - Waste from the use of pharmaceutical products, NOS	2 tonnes per annum approx.	Category A	Veolia - Corio treatment plant
R130 - Cytotoxic substances	2 tonnes per annum approx.	Category A	Veolia - Corio treatment plant

This operation is currently underway at the Veolia Shepparton liquid treatment plant whereby a shipping container is installed at the site and consolidates medical waste from around the area. This waste is then removed every two to three weeks to the Veolia licenced medical waste facility in Corio. An example of a waste transport certificate documenting transport of waste from Shepparton to Corio is attached in Appendix 12.

12.3.3 Best practice of PIW management

Best practice management of storage of PIW at the site will be in accordance with the site risk assessment provided in Appendix 9. No waste is treated at the site.

12.3.4 Financial assurance

Financial assurance calculations are attached in Appendix 13 and have been completed for maximum storage of 7.02m³ of PIW onsite as per the following bin configuration in the container:

- 3 x 660L bins = 1980L
- 16 x 240L bins = 3840L
- 10 x 120L bins = 1200L

TOTAL for the site = 7020L = 7.02m³.

13 Environmental management

13.1 Risk assessment of non-routine operations

The following are examples of non-routine operational conditions in relation to the proposed operation at the Portland site:

- Power failure at site;
- Equipment failure - breakdown of refrigerator;

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- Accidental spill during unloading/loading of container;
- Spill during storage.

A power failure at site isn't expected to last long enough to impact operations, should it do so the frequency of waste collection from the site can be increased.

In case of breakdown of the refrigerator, until it is repaired more frequent trips will be made to remove bins from the container to reduce the risk of odour in hot weather.

Accidental spill during loading / unloading - Trucks will back up to container location so bins are only out of the container for a minimal amount of time during loading and unloading. A spill kit will be located adjacent to container in case of spill during unloading/loading of the container

Spill during storage - A perforated floor in the container allows for any spills to drain to a secondary containment area underneath. A camlock fitting is present for a liquid tanker to connect to and suck out any spills and wash out the containment area. The liquid waste will then be transported and disposed of at a lawful facility under an EPA waste transport certificate.

Refer to the environmental risk assessment in Appendix 9 for further details.

13.2 Management System

Veolia maintains ISO 14001 certification, a copy of the current certificate of approval is included in Appendix 14.

The Veolia Australia and New Zealand (ANZ) Environment Policy outlines the businesses commitment to deliver services and activities in an environmentally sustainable and responsible manner. The policy is reviewed regularly and signed off by the Managing Director / CEO of Veolia ANZ. A copy of the policy is included in Appendix 15.

Section 3 Other Approvals

14 Seeking other EPA approvals

14.2 New licence or licence amendment subsequent to works approvals

A new licence is required at the premises as the site currently does not operate under an EPA Licence. The storage of PIW onsite requires the site to be licenced as per the Scheduled Premises Regulations (2017) under Prescribed industrial waste (PIW) management (A01).

The proposed operation does not involve any discharges to air or water.

15 Post decision - operational requirements

15.1 Financial assurance

A financial assurance is required for the premises as it is specified in the Scheduled Premises Regulations as A01 - PIW management. A financial assurance calculation is attached in Appendix 13 . The amount calculated is \$7,577.45 and as it is under \$10,000 Veolia requests a waiver be granted by EPA.

Appendix 1: Company legal entity form and ASIC company search

Appendix 2: Portland Medical existing conditions layout plan

Appendix 3: Container bund calculations

Appendix 4: Portland Medical proposed site layout plan

Appendix 5: Proposed bin storage layout plan and elevation

Appendix 6 - Portland Medical container layout

Appendix 7: Portland Medical sensitive receptors plan

Appendix 8: Portland medical process flow diagrams

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Appendix 12: Example waste transport certificate

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Appendix 14: Veolia ISO14001:2015 certificate of approval

Appendix 15: Veolia Environment Policy