

ITEM 8.1.1

ATTACHMENT 5  
SCHEDULE OF SUBMISSIONS



No.	Name and Address of Submitter	Submitter Comments	Applicant's Comments	Recommended Response
1	<p>Sasha De Brito Advisory Services Coordinator</p> <p>Department of Fire and Emergency Services</p> <p>20 Southport Street, West Leederville, WA 6007</p>	<p>Planning Bulletin 1111/2016 clarifies that State Planning Policy 3.7 (SPP 3.7) should be applied pragmatically, and states:</p> <p>“Exemptions from the requirements of SPP 3.7 and the deemed provisions should be applied pragmatically by the decision maker. If the proposal does not result in the intensification of development (or land use), does not result in an increase of residents or employees; or does not involve the occupation of employees on site for any considerable amount of time, then there may not be any practicable reason to require a BAL Assessment. Exemptions may apply to infrastructure including roads, telecommunications and dams; and to rural activities, including piggeries and chicken farms which do not involve employees on site for a considerable amount of time.”</p> <p>The Planning Bulletin also specifically refers to SPP 3.7 applying to “development applications for habitable buildings”.</p> <p>DFES supports the Shire’s ‘precautionary approach’ taken with respect to ensuring that bushfire risk</p>	<p>Appendix 3 to the Planning Report presents a Bushfire Hazard Level Assessment and Bushfire Management Plan prepared by Ecosystem Solutions. The Plan considers vegetation type and structure, climate, the topography of the site and adjoining lands and reviews the Bushfire Management Plan originally developed for the North Bannister Resource Recovery Park (NBRRP) in the context of the expanded footprint.</p> <p>The site currently has 2 x 160 kL water tanks next to the main office compound area. These tanks have a fixed standpipe for rapid filling of appliances as needed and there is a hardstand and sufficient cleared area for turnaround next to the standpipe. Two portable units are also available on-site for rapid deployment for spot fires as needed. There is also a large stormwater dam for refilling the water trucks and/or fire-fighting tanks if needed.</p> <p>A 15 kL water truck, normally used for dust suppression, can be used as a water cart as required. The truck has couplings compatible for connection to the local brigade’s fire appliances and can be manoeuvred readily throughout the site.</p> <p>The Bushfire Management Plan concludes that:</p> <ul style="list-style-type: none"> <li>the proposed expansion and the facilities to be established are such that, with the implementation of this Bushfire Management Plan, fire threat to people and property within this development is significantly reduced.</li> <li>the proposed Expansion plan provides acceptable solutions and responses to the relevant performance criteria outlined in Guidelines for Planning in Bushfire Prone Areas (WAPC, 2015).</li> </ul>	<p>Noted. A condition is proposed requiring implementation of the “land manager’s responsibilities”, set out in the Bushfire Management Plan.</p>

		<p>management has been considered for this proposal, and actions should be taken by owners/operators to reduce the risk of loss of property from the effects of bushfire attack.</p> <p>The BMP Coversheet submitted as part of the referral has also not identified a trigger for referral to DFES.</p>		
2	<p>Andrea Lawson Senior Planning Officer</p> <p>Department of Planning, Lands and Heritage</p> <p>Unit 2b, 11-13 Pinjarra Road, Mandurah WA 6210</p>	<p>The Department has no objections and no further comments on the proposal.</p>	<p>The Applicant notes that there is no objection from the Department of Planning, Lands and Heritage.</p>	Noted
3	<p>Greg Cavanagh HWEDA Chairperson</p> <p>Hotham Williams Economic Development Alliance</p> <p>c/ Shire of Williams PO Box 96, Williams, WA 6391</p>	<p>The Hotham Williams Economic Development Alliance Inc. (HWEDA) is supportive of the expansion of this facility to meet the needs of waste disposal and recovery. The original development of a facility on this site had merit subject to the operator meeting their environmental obligations.</p> <p>In considering an expansion of the facility it is timely to review the environmental conditions. HWEDA is concerned about the amount of rubbish that is blowing out of trucks and ending up on the road verge of Albany Highway. It is aware that the operator is taking action to manually</p>	<p>The Applicant notes that HWEDA is supportive of the proposed expansion, subject to the operator meeting their environmental obligations.</p> <p>SUEZ is conscious of the fugitive litter issue along Albany Highway and has been working progressively to minimise the problem. In response to the problem, SUEZ has developed a Roadside Litter Management Plan which it considers will minimise the problem and associated amenity impacts.</p> <p>SUEZ concurs with HWEDA that implementation of the Management Plan should be a condition of approval of the Expanded Footprint.</p> <p><b>Refer also to Response to Item 5 in respect of Roadside Litter.</b></p>	<p>A condition is proposed requiring the submission, approval and implementation of a Fugitive Roadside Litter Management Plan.</p>

		pick up this rubbish, which is welcomed. However, there is value in including a condition on any development approval that can enforce the requirement for waste not to be allowed to leave the truck during transport to the facility.		
4	Phil Knight Project Manager Department of Jobs, Tourism, Science and Innovation 1 Adelaide Terrace, East Perth WA 6004	South32 Worsley Alumina recently advised that it has no objection to this application.	The Applicant notes that there is no objection from South32 Worsley Alumina or the Department of Jobs, Tourism, Science and Innovation.	Noted
5	Ron and Helen Wessels 7498 Highway, Boddington, WA 6390	As the closest permanent residents only several kilometres to the south east of this plant we strongly oppose any increase to its footprint.  Firstly this will treble the size of the foot print and will overlap and impact on the water course to the south east, as indicated clearly on the map in the application. This water course flows through the forest and onto farm land, ours included. This can create a serious environmental issue, both in the forest and on the farmlands. Sheep drink from these water courses.  Secondly, we were led to believe initially that the disposal would be green and kitchen wastes. This is obviously not the case. I note from the application that there is a used tyre stockpile area. Again an environmental and fire risk.	<p><b>Risk of Pollution of Downstream Stock Water &amp; Runoff</b></p> <p>The water course / stream is an expression of the groundwater table and primarily flows in winter and spring. The groundwater beneath the footprint flows in a general south-easterly direction. The groundwater quality is not suitable as potable supply but is acceptable for stock watering purposes.</p> <p>There are four potential sources of contamination of the stream by the landfill operation and specifically:</p> <ul style="list-style-type: none"> <li>• Leachate moving into the groundwater below the landfill</li> <li>• Overflow of leachate from the holding / evaporation ponds</li> <li>• Contamination from the Composting Area</li> <li>• Fuel / chemical spills.</li> </ul> <p><i>Landfill Leachate:</i></p> <p>The North Bannister Resource Recovery Park (NBRRP) Landfill is highly engineered and conforms with Department of Water and Environmental Regulation (DWER) requirements for Class II &amp; III Landfills. The floor of the landfill cells within the current and expanded footprints will maintain a minimum two metre clearance to the groundwater, where necessary by the use of fill to raise the floor</p>	Noted. Conditions are proposed requiring a Drainage Management Strategy and a Fugitive Roadside Litter Management Plan. DWER will address various matters through the Works Approval and associated licencing.

		<p>Thirdly, we were directly behind a Suez truck going to Perth and it had plastic blowing out from its bins. The canopy was so shredded at the back that black strips were hanging off. I could see down the left side of the truck and observed rubbish plastic strips hanging out and blowing around, often coming loose and blowing into the bush. I have taken some photographs which I've attached showing flapping plastic, the shredded cover and hanging black plastic is clearly visible.</p> <p>In the Boddington Bulletin recently Suez gave an undertaking to review all the trucks and to prevent any further rubbish blowing out along the road. And whilst a couple of people have gained employment cleaning up the verges, it only took a week for the rubbish to be noticeable again. With expansion I would expect more trucks and hence more rubbish. We travel the highway a couple of times a week and notice the build-up. On a main tourist route this is totally unacceptable</p> <p>Finally, it is our view that if Suez cannot manage what they have currently how are they going to manage a footprint treble the size?!</p>	<p>level of the landfill cell. As discussed at Section 7.2 of the Planning Report the landfill is designed and constructed to minimise the risk of any leachate moving into the groundwater system and comprises a series of lining layers as follows (from bottom to top):</p> <ul style="list-style-type: none"> <li>• A 500 mm low permeability material (typically clay), compacted and rolled to act as an attenuation layer and initial buffer.</li> <li>• A Geosynthetic Clay Liner (GCL) will be installed over the base of the landfill cells and on the side slopes between the base and the Liner. The GCL will have a hydraulic conductivity of less than <math>1 \times 10^{-9}</math> m/s. The GCL will limit contaminant migration, water seepage and landfill gas migration in the unlikely event that the HDPE Liner is punctured.</li> <li>• A 2.0 mm thick High Density Polyethylene (HDPE) membrane liner will be placed directly above the GCL to further mitigate the risk of contaminant migration and control landfill gas migration. All joints are heat welded on-site and tested for compliance.</li> <li>• A non-woven geotextile cushion layer is placed on top of the HDPE liner to serve as a protective layer, minimising the risk of damage or puncture during installation of the drainage layer and operation of the landfill.</li> <li>• A 300 mm aggregate layer will be laid on top of the cushion layer to act as a leachate drainage layer. The hydraulic conductivity of the drainage layer will be greater than <math>1 \times 10^{-3}</math> m/s.</li> <li>• Leachate collection pipes will be installed at the base of the drainage layer.</li> <li>• A non-woven geotextile layer will be placed on top of the aggregate to serve as a separation layer from the waste.</li> </ul> <p>Existing groundwater monitoring bores installed in 18 locations across and surrounding the existing and proposed landfill areas have been regularly sampled since 2011. Review of the groundwater quality database and field investigation show no evidence of contamination to groundwater at the existing landfill and proposed landfill extension site.</p>
--	--	---	---

We totally oppose any increase to the size of the footprint of the waste receiver area.

*Overflow of Leachate:*

As discussed at Section 7.4 of the Planning Report, leachate generated within the landfill is extracted and pumped to lined leachate holding / evaporation ponds adjacent to the landfill.

The leachate management system currently consists of one Leachate Pond (LP1) with a second Pond (LP3) nearing completion, both providing storage capacity for the landfill leachate.

A third Leachate Pond (LP2) exists for the existing composting platform but is not utilised for landfill leachate. In addition a fourth Leachate Pond (LP4) will be constructed when the composting platform is expanded for containment of organics leachate only.

The proposed management system for the leachate from the landfill involves extraction of leachate via a pump system, which is then transferred to the landfill Leachate Ponds (LP1 and LP3).

Table 1: Properties of Existing or Soon to be Constructed or Completed Leachate Infrastructure

Pond	Storage Capacity operating level freeboard	Leachate Source	Freeboard	Storm Event
LP1 3	10 770 m <sup>3</sup>	Landfill & Compostin g	1.1 m	1:20 year Annual Recurrence Interval (ARI), 24 hr duration
LP2 2	2 900 m <sup>3</sup>	Compostin g	0.5 m	1:100 yr ARI, 72 hr duration
LP3 3, 4	15 380 m <sup>3</sup>	Landfill	0.3 m	
LP4 2	2 900 m <sup>3</sup>	Compostin g	0.5 m	

1 No landfill leachate is stored in the two leachate ponds designated for the organics platform. The pump system only allows leachate from the organics platform to be pumped to LP1.

	<p>2 LP2 and LP4 has sufficient capacity to accommodate the 1:20yr ARI, 24 hr storm event when at full operating level. Both ponds have sufficient capacity to contain the 1:100yr ARI, 72hr event when empty. Should the 1:100yr ARI event occur while the ponds are full, the excess run-off will be pumped to LP1.</p> <p>3 LP1 and LP3 has been designed as a combined system as LP3 will automatically overflow into LP1, via a gravity system, when it reaches its maximum operating water level. The freeboard in LP1 is sufficient to accommodate the 1:100 yr ARI, 72 hr duration incident rainfall on all four leachate ponds.</p> <p>4 Note that LP3 has been sized to accommodate leachate from the existing landfill as well as leachate from SUEZ's closed Shale Road landfill. This allows SUEZ to manage the leachate from both facilities in a responsible manner. The capacity of LP3 is based on conservative estimates of leachate production.</p> <p>Leachate levels within the Ponds are closely monitored, particularly during winter. Freeboard levels are maintained at all times through recirculation over the active landfill cell and, in extreme events, tankering of leachate off-site to an approved liquid waste disposal facility.</p> <p>An automated leachate monitoring system is in the process of being installed to monitor and control the flow of leachate within the facility. Some of the features of this system include an intrinsically safe liquid level monitoring system with multiple layers of overflow protection, an automatic notification system to site personnel and automatic pump start up and shut down. There has not been an overflow event of the Leachate Ponds; including during the heavy rainfall events in early and mid-2017.</p> <p>Future leachate ponds for landfill leachate will be designed and constructed, as required, to the same rigor as the existing system based on the ongoing monitoring and modelling results. Site planning for the Expanded Footprint makes provision for an additional three Leachate Ponds if required - LP5 &amp; LP6 to the north of LP3 and LP7 to the south of the composting area. The leachate management strategy aims to reduce pond storage levels during the summer season to maximise available capacity for subsequent winter periods.</p>	



	<p>Expansions to the leachate pond system for the landfill leachate will be designed to accommodate inflow from the following sources:</p> <ul style="list-style-type: none"> <li>• Leachate from the landfill sumps (leachate production is expected to reach a 'steady state' as old cells are capped and new cells are developed)</li> <li>• Contaminated run-off from the landfill cells</li> <li>• Incident rainfall on the leachate ponds</li> <li>• 1:100 yr ARI, 72 hr storm event</li> <li>• Leachate from the composting leachate ponds when the capacity of these ponds are exceeded (e.g. rainfall events equivalent or greater than 1:100 yr ARI, 72 hr events.)</li> <li>• Leachate from SUEZ's closed Shale Road Landfill.</li> </ul> <p>SUEZ is confident that leachate volumes can be adequately accommodated within the Leachate Pond system and that practical measures are in place to deal with extreme weather events.</p> <p><i>Composting Area:</i></p> <p>SUEZ have lodged a separate development application with the Shire to increase the size and throughput of the green waste composting operation at the NBRPP from the current 35,000 tpa to 110,000 tpa.</p> <p>The composting operation is undertaken on sealed hardstand area, being a combination of bitumen hardstand and concrete with finished product to be held in lined concrete bunkers to minimise the risk of any leachates entering the groundwater system.</p> <p><i>Fuel / chemical spills:</i></p> <p>Fuels and chemicals are stored within appropriately sized concrete bunded areas to prevent movement outwards into the groundwater system in the event of a spill. Re-fuelling is conducted on a bunded hardstand area to likewise contain spillages.</p>
--	--

	<p>Given the above, it is considered that the risk of contamination of the southward flowing creek impacting stock watering requirements downstream is minimal.</p> <p><b>Inclusion of Tyre Storage Area</b></p> <p>The proposed Tyre Storage Area is for the purposes of the interim holding of tyres recovered from the incoming waste stream prior to transport to Perth for recycling. The storage area is hard surfaced and is not for the purposes of long term holding / disposal of tyres.</p> <p><b>Fugitive Roadside Litter</b></p> <p>It is important to note that the Application before Council seeks to expand the current landfill to extend the operating life of the landfill.</p> <p>SUEZ does not anticipate an increase in the number of trucks / waste trailers accessing the site as a consequence of progressive improvements to current recycling / reuses rates and the emergence of newer technologies such as Waste to Energy that will over time reduce the quantity of waste needing to go to landfill.</p> <p>SUEZ is conscious of the fugitive litter issue along Albany Highway and has been working progressively to address the problem since acquiring the NBRRP in mid-2016.</p> <p>Measures that SUEZ have initiated to date to address the matter are:</p> <p><i>SUEZ Waste Transfer Trailers:</i></p> <p>SUEZ utilises side tipping waste transfer trailers from its Transfer Stations at Landsdale and Welshpool and “walking floor” trailers from its Bibra Lake Transfer Station to transfer waste to the NBRRP. The trailers have a rollover canvas cover to prevent waste escaping. It became evident that the current covers were inadequate and SUEZ commenced modifying its fleet of trailers in early 2017 to improve waste containment and improve the roll-over canvas covers. In particular, the hydraulic arms of the trailers have been modified to accommodate longer and broader covers to provide greater overlap at the front, rear and sides of the trailer. Modification of the SUEZ trailer</p>	
--	---	--

	<p>fleet is expected to be completed by late 2017 and it is expected that the modifications will significantly reduce fugitive litter. Initial indications from the trailers that have been modified so far are encouraging. SUEZ will continue to monitor the operation of the modified trailers and will undertake further enhancements, as required, to ensure fugitive litter is minimised.</p>	
	<p><i>2nd Party Waste Trailers:</i></p> <p>SUEZ has established an inspection regime of 2nd Party waste trailers to ensure adequate cover of the load. Trailers that do not comply with SUEZ's requirements are banned from accessing the NBRRP until appropriate modifications have been undertaken and approved by SUEZ.</p>	
	<p><i>Albany Highway Litter Collection:</i></p> <p>SUEZ has instituted a Roadside Litter Collection Team and has completed collection of all roadside litter from the NBRRP entry road to the top of Bedforddale Hill (Canning Dam Rd). SUEZ will now commence a fortnightly litter patrol along the length of Albany Highway from Bedforddale Hill to the NBRRP Entry Road.</p> <p>Initial monitoring of Albany Highway from the entry road north to Bedforddale Hill indicates that measures taken to date in respect of the waste transfer trailers have been effective in reducing the fugitive litter with further improvements expected as the cover modifications to the balance of the waste trailer fleet are completed.</p> <p>Initial monitoring has indicated a fortnightly collection regime as likely to be adequate with the possibility of an increased interval as further litter containment measures come into effect.</p>	
	<p><b>Fugitive Roadside Litter Management Plan</b></p> <p>While minimisable, SUEZ acknowledges that some fugitive roadside litter is unavoidable. In order to minimise the visual and amenity impacts of fugitive litter along Albany Highway, SUEZ will implement the following management regime.</p>	

FUGITIVE ROADSIDE LITTER MANAGEMENT PLAN

*Waste Trailer Covers:*

- SUEZ and 2nd Party Waste Trailers shall be required to maintain an effective cover to minimise escape of litter during the transport of waste to the NBRRP. Waste Trailers that do not comply with SUEZ cover requirements will be prohibited from accessing the NBRRP.
- SUEZ will inspect all trailers at least weekly, including 2nd Party trailers, to ensure that the covering is not damaged to the extent where fugitive litter may result during transportation. Waste Trailers covers that are damaged will be prohibited from accessing the NBRRP until repair or replacement of the faulty cover has been undertaken.

*Loading of Waste Trailers:*

- As far as practical, light waste such as paper and plastics that may become airborne during transportation, shall be limited to the lower three-quarters of the waste trailer with denser waste placed on top to minimise the risk of escape of litter.
- Following completion of loading, the surface of the waste will be tamped down as hard as practical to minimise the risk of escape of litter.
- Each load will be inspected for any loose surface materials prior to departure.

*Roadside Litter Collection:*

- SUEZ will retain at the NBRRP site a Roadside Litter Collection Team to undertake on-going roadside collections on both a regular and ad-hoc basis in the event of an incident.
- SUEZ will undertake fortnightly Litter Collection along the length of Albany Highway from Bedfordale Hill to the NBRRP Entry Road.

6	Neil Guise Regional Director Southern Region Department of Primary Industries & Regional Development  PO Box 1231, Bunbury, WA 6230	The Agriculture and Food division of the Department of Primary Industries and Regional Development (DPIRD) does not object to the proposed expansion of the Resource Recovery Park at the abovementioned lot as this is only an expansion of the current activities and the area is well buffered from any sensitive land uses.	<ul style="list-style-type: none"> <li>SUEZ, in consultation with the Shire of Boddington, will review the frequency of the Roadside Litter Collection regime, initially every three months, to determine the effectiveness of the collection regime. SUEZ, with the agreement of the Shire, may increase or decrease the frequency of Roadside Litter Collection depending on the outcomes of monitoring over the previous quarter.</li> <li>SUEZ will, as soon as practical and within 24 hours, respond with a Collection Team to a particular litter problem reported to it by the Shire of Boddington or to an incident litter spill from either its waste trailers or those of 2nd Parties.</li> </ul> <p>The Applicant notes that there is no objection from the Department of Industries &amp; Regional Development – Southern Region.</p>	Noted
7	Dr Coert Erasmus  PO Box 155, Boddington, WA 6390	The items and application on behalf of SUEZ Recycling & Recovery (Perth) Pty Ltd, detailed in your letter are alarming and cause of significant concern.  Most alarming, is the lack of supporting documentation provided to the local community. To date, little has been provided, demonstrating research and a formal assessment of the impacts the expansion of this rubbish dump will have on the wider community, and future generations of families in this area.	<p>The following addresses the specific issues raised by the Respondent.</p> <p><i>Odour:</i></p> <p>A proposed putrescible landfill site (Class II and III) is subject to a minimum recommended separation buffer distance of 1000 m (1 km) (EPA, 2015).</p> <p>The NBRRP landfill site is located 4.4 km from the nearest sensitive receptor (residence) which combined with the intervening landform and vegetation provides a considerable buffer minimising the risk of odour impacting the amenity of the surrounding environment.</p> <p>The following management and mitigation measures are adopted to minimise odour emissions during the operation of the facility:</p>	Noted. Conditions are proposed requiring a Drainage Management Strategy, a Fugitive Roadside Litter Management Plan, managing odour and controlling dust.  DWER will address various matters through the Works Approval and

<p>Prior to the assessment of the development application to the Mid-West/Wheatbelt (Central) Joint Development Assessment Panel, I urge the Shire councillors, and yourself in your capacity as the Shire's Chief Executive Officer, to formally respond to and provide details relating to the following:</p> <ul style="list-style-type: none"> <li>• Odour - please explain and provide pertinent details of the applicant's plan to mitigate the effects of the odour from the rubbish dump and proposed expansion.</li> <li>• Runoff - please explain and provide pertinent details of the applicant's plan to mitigate the effects of its proposed expansion on natural runoff of water during heavy rain or storms. Specifically, you are urged to request details as to how the applicant plans to address the contamination of drinking water supplies such as lakes and rivers.</li> </ul>	<ul style="list-style-type: none"> <li>• All wastes delivered to the site are contained in a covered vehicle to minimise potential odour emissions.</li> <li>• Daily covering of the active landfill cell with 150 mm thick soil cover or alternative cover materials.</li> <li>• Progressive covering of waste to limit oxygen availability and aerobic decomposition.</li> <li>• Odorous waste is covered immediately upon placement.</li> <li>• Check areas previously covered regularly and apply more cover where necessary.</li> <li>• Only one tipping face is active at any time and the surface area of the active tipping face is kept as small as possible.</li> <li>• Operational procedures adopted at the tipping face will aim to prevent surface ponding of water which can potentially emit odours.</li> <li>• Effective compaction of the waste will also act to minimise the release of odours from recently tipped waste.</li> <li>• Implementation of a landfill gas collection system.</li> <li>• Effective collection and management of leachate.</li> <li>• Progressive capping of landfill cells to contain landfill gas.</li> <li>• Monitoring landfill gas within the gas extraction system.</li> <li>• Maintenance of on-site buffers.</li> </ul> <p>Odour is also managed through the implementation of the relevant conditions within DWER Licence.</p> <p><i>Runoff:</i></p> <p>The landfill is positioned within the Hotham Catchment and located on the southern side of a ridge line dividing the Hotham and Upper Serpentine Catchments. This location means that the risk of groundwater or surface water impact from the site on the nearest and most substantial watercourse/ tributary is negligible due to the directional flow of water into the Hotham Catchment (DWER, 2016). The nearest creek to the landfill is Gringer Creek, approximately 6 km south-east of the landfill, which flows into the Hotham River.</p> <p>Surface water on site is channelled from around the southern and eastern edges of the existing landfill to Stormwater Dam 1. Overflow</p>	<p>associated licencing.</p>
---	---	------------------------------

	<p>minimal impact to community revenue.</p> <ul style="list-style-type: none"> <li>Plants and wildlife - please explain and provide pertinent details of the applicant's plan to mitigate the effects of the intended expansion on native species of plants and animals, as a result of clearing of native habitats. Additionally, please provide details of the applicants plan to mitigate health complications and the potential death of plants and animals, and the destruction of food sources for local animals.</li> <li>Atmosphere - please explain and provide pertinent details of the applicant's plan to mitigate the effects Of harmful chemicals found in household appliances and other litter, which can be extremely damaging when released. Specifically, please provide details of the applicants planned treatment of refrigerators and freezers that contain either tetrafluoroethene or chloro-fluoro-carbon, both of which have harmful effects on the ozone layer.</li> </ul>	
	<p>from Stormwater Dam 1 (SD1) drains along a natural drainage channel toward Stormwater Dam 2 (SD2), which in turn overflows into Stormwater Dam 3 (SD3). Surface water also drains east across the southern part of the proposed landfill extension along existing, indistinct water courses. Stormwater Dam 4 (SD4) is located in the south-eastern corner of the site and overflows from this dam drains east along an existing water course until its confluence with the south-easterly flowing drainage line between SD2 and SD3.</p> <p>Surface water data collected from SD1, SD2 and SD3 between July 2012 and September 2016 indicates that collected surface water run-off from the site is fresh, slightly acidic and has a low nutrient content (average total nitrogen = 2.3 mg/L). The relatively good water quality and the absence of key landfill indicators, such as elevated potassium to chloride ratios and elevated nitrogen species, supports the view that surface water is currently not impacted by the landfill. The historic surface water laboratory data (since 2012) indicates some variability in laboratory results which may reflect seasonal influences due to evaporation and rainfall effects.</p> <p>Surface water will be managed in accordance with a site specific Surface Water, Drainage and Sediment Control Plan, which will include the following management measures:</p> <ul style="list-style-type: none"> <li>Manage the storage of chemicals and hazardous materials in accordance with industry best practice and manufacturer's recommendations.</li> <li>Divert undisturbed (uncontaminated) surface run-off in a manner to prevent erosion.</li> <li>Prevent stormwater from disturbed areas flowing offsite or entering waterways.</li> <li>Store all waste materials (drums, chemical containers, etc.) in a protected, bunded area well away from waterways.</li> <li>Ensure all spills and leaks are cleaned up immediately and waste correctly disposed of.</li> <li>Ensure all contaminated soil/water is removed by licensed contractor.</li> <li>Position stockpiles in a suitable area away from stormwater/surface water flow.</li> </ul>	

			<p>Ambient surface water quality is monitored biannually, in accordance with conditions in the DWER Licence</p> <p><i>Aesthetics:</i></p> <p>The landfill site is located in a remote bushland area (approximately 4.4 km from the nearest sensitive receptor), which combined with the intervening landform and vegetation, provides a considerable visual buffer minimising impacts to visual and landscape amenity; including from Albany Highway. The Expanded Footprint is unlikely to impact tourism associated with movement on Albany Highway.</p> <p>A small section of the 1000 km Bibbulmun Track passes the northern and western boundaries of Lot 2 and is approximately 400-500 m to the northern boundary of the existing facility. The landfill will be visually obstructed from the Track due to its positioning beyond the crest of a hill and the regrowth of the harvested Blue Gum Plantation. Following the 2023 Blue Gum harvest, a 20 m screening barrier of trees will be retained to maintain visual obstruction.</p> <p>A Visual Impact Assessment (Perthwaste, 2011 and Golder, 2017), conducted in discussion with the Bibbulmun Track Foundation found the landfill will be visible from the summit of Boonerring Hill. Boonerring Hill is located approximately 800m west of the landfill. The visual impact of the landfill will be minimised through progressive capping and revegetation and will be managed in accordance with the DWER Licence and NRRRP Environmental Management Plan.</p> <p>It is noted further that the Bibbulmun Track Foundation have considered the proposed Expanded Footprint proposal and raised no objection subject to maintaining screening of the facility, progressive capping and revegetation and consideration of noise and smell impacts.</p> <p><i>Plants &amp; Wildlife:</i></p>
--	--	--	---



		<p>It is important to note that the site of the proposed Expanded Footprint is currently a Blue Gum Plantation and no indigenous flora will be cleared to accommodate the Footprint.</p> <p>Flora</p> <p>A Flora and Vegetation survey (ENV Australia Pty Ltd (ENV), 2011) and a desktop ecological survey (Animal Plant Mineral (APM), 2017) was conducted for the Project. Whilst the 2011 survey was conducted in an area outside of the proposed expansion zone (&lt;100 m to the north), the findings are considered applicable to the expansion. This is due to the degree of likeness between the vegetation complexes with both areas being dominated by Tasmanian Blue Gum (Eucalyptus globulus) plantation with isolated patches of disturbed remnant vegetation. A summary of survey findings is presented below:</p> <ul style="list-style-type: none"> <li>• The proposed expansion area extends into Tasmanian Blue Gum plantation. There are two adjoining patches of remnant vegetation that could potentially be foraging and or breeding habitat, but the final landform design footprint avoids these areas.</li> <li>• The dominant vegetation complex of the proposed project area is Dwellingup 4 (D4) (Mattiske and Havel, 1998), which is comprised of open forest of Eucalyptus marginata, Corymbia calophylla, Banksia grandis and Allocasuarina fraseriana. The D4 vegetation complex is found to be well represented in the greater region.</li> <li>• No species of conservation significance were recorded within the survey area. All species of conservation significance that were identified as potentially occurring in the survey area are perennial and would have been identified during the survey if present.</li> <li>• The database search determined that no Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) are known to occur within the Project area.</li> <li>• DWER, Department of Biodiversity, Conservation and Attractions (DPCA) and the Federal Department of Environment and Energy (DEE) databases have no record of groundwater dependant ecosystems within the catchment in which the landfill is located (within a 15 km search radius).</li> </ul>	
--	--	--	--

		<ul style="list-style-type: none"> <li>• Vegetation condition within the survey area varied from 'Degraded' to 'Completely Degraded'. Known disturbances include historical logging, fire and invasion by introduced species.</li> <li>• Areas that have been entirely altered from their natural state were described as being 'Completely Degraded' and are represented by the Tasmanian Blue Gum (<i>Eucalyptus globulus</i>) plantation.</li> <li>• As none of the conservation significant species were identified during the survey and the vegetation was recorded as 'Degraded' it is considered unlikely that Lot 2 Albany Highway supports species of conservation significance.</li> </ul> <p>The landfill has been specifically located to avoid clearing of remnant bushland on the site. The following flora management measures will be included in a site specific management plan:</p> <ul style="list-style-type: none"> <li>• Restrict vegetation clearing to the minimum area required for works and clearly demarcate limits of vegetation clearing and disturbance (including marking on site map).</li> <li>• Carry out progressive and approved revegetation as per the Operations Management Plan.</li> <li>• Implement dust management measures.</li> <li>• Educate site personnel on practices to avoid damage to native flora, minimise soil disruption, and appropriate weed management.</li> <li>• Ensure spoil piles with weeds are at least 25 m from native vegetation.</li> <li>• Ensure civil machinery and equipment are free of plant matter and soil when entering the site.</li> </ul> <p>Fauna</p> <p>The desktop ecological survey (APM, 2017) identified that up to 27 fauna species have the potential to occur within the project area. The fauna species of conservation significance are:</p> <ul style="list-style-type: none"> <li>• Chuditch (<i>Dasyurus geoffroii</i>) is listed as Vulnerable under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) and the Wildlife Conservation Act 1950 (WC Act)</li> <li>• Carnaby's Black Cockatoo (<i>Calyptorhynchus latirostris</i>) endangered under the EPBC Act and WC Act</li> </ul>
--	--	---

	<ul style="list-style-type: none"> <li>• Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) endangered under the EPBC Act and WC Act</li> <li>• Forest Red-tailed Black Cockatoo (<i>Calyptorhynchus banksii naso</i>) is listed as Vulnerable under the EPBC Act and WC Act</li> <li>• Western brush wallaby (<i>Macropus irma</i>) is listed as a P4 under the WC Act.</li> </ul> <p>All three Black Cockatoo species found in the State's south-west are considered likely to occur in the area (DOE, 2012). The Chuditch and the Western brush wallaby are known to occur in the greater area (DEE, 2017).</p> <p>Potentially suitable feeding, refuge and maternal denning habitats for the Chuditch and Western Brush Wallaby; and nesting habitat for the Black Cockatoos, were identified in the remnant vegetation found adjacent to and outside of the proposed expansion footprint. However, the small size and disturbed/absent understorey limits the diversity of native fauna potentially occupying the area (APM, 2017).</p> <p>The following fauna management measures will be included in a site specific management plan:</p> <ul style="list-style-type: none"> <li>• Relocate native fauna if discovered on site/if required during site works. Fauna can only be handled by qualified and licensed personnel.</li> <li>• Restrict access to Project Area to prevent community and fauna access.</li> <li>• Adequately contain/cover all waste and make landfill areas inaccessible to fauna, including feral animals.</li> <li>• Implement traffic control measures for the Project e.g. speed limits to prevent fauna accidents.</li> <li>• Implement dust and noise management measures as specified within the Operations Management Plan.</li> <li>• Fill excavations as soon as practicable.</li> <li>• Conduct inspections of excavations each morning to locate any trapped fauna and relocate if necessary.</li> </ul> <p><i>Atmosphere:</i></p>

	<p>Metropolitan local councils specifically target whitegoods for recycling, offering free verge collection services, diverting this waste from landfill. Additionally, SUEZ endeavours to recover and recycle valuable materials before landfill disposal.</p> <p>The landfill will only accept waste (type and quantity) permitted under the DWER Licence. Waste accepted at the landfill will be processed and disposed of in accordance with License conditions.</p> <p>The following chemical and hazardous waste management measures will be included in a site specific management plan:</p> <ul style="list-style-type: none"> <li>• Store all chemicals and hazardous materials in containment appropriate for the volume and nature of the chemicals.</li> <li>• Assess the location, contents, specification/suitability and integrity of the chemical storage areas as required (i.e. not near waterways or drains).</li> <li>• Contain and appropriately manage spills using absorbent materials and spill kits.</li> <li>• Store spill control equipment in critical locations to allow for a quick response.</li> <li>• Educate site personnel as to spill response and kit locations.</li> <li>• Manage contents of spill kits to ensure adequate supplies are available.</li> </ul>		
8	<p>The Applicant notes that there is no objection from the Department of Mines, Industry Regulation and Safety.</p>	<p>The Department of Mines, Industry Regulation and Safety has determined that this proposal raises no significant issues with respect to mineral and petroleum resources, geothermal energy, and basic raw materials.</p>	<p>Glennis Hall Geologist Resources Branch Department of Mines, Industry Regulation and Safety 100 Plain Street, East Perth, WA 6004</p>
9	<p>The following addresses the specific issues raised by the Respondent. <i>Precedent:</i> Approval of the proposed Expanded Footprint does not set a precedent for additional future landfills within the Shire.</p>	<p>Friends of the Reserves with Boddington River Action Group and general community members (the latter by petition) all objected to the original Perth Waste plan to establish a waste disposal site for</p>	<p>Greg Marston President of the Reserves <a href="mailto:grmymarston35@bigpond.com">grmymarston35@bigpond.com</a></p>
	<p>Noted</p>		
	<p>Noted. DWER will address various matters through the Works Approval and associated licencing.</p>		

	<p>Perth rubbish on the Culford property in North Bannister. In 2011, the Shire went through due process and gave approval for rubbish disposal on Culford subject to meeting a variety of conditions, however we believe that social impact and Boddington community views should have been the prime consideration. Other Shires, including Wandering and York, have rejected similar proposals to dump Perth rubbish in their domain.</p> <p>Our concern for the Suez operation is where next after the Culford property can take no further rubbish from current or later expansion projects? The Boddington Shire has already set a precedent and will have greater difficulty in refusing the establishment of new properties for the purposes of dumping Perth waste. While country shires accept this external waste, there is no incentive for minimising/utilising waste stream resources. We acknowledge that this comes under the banner of State and Federal Government agencies.</p> <p>Within the context of the subject line expansion plan for Culford, we can only hope that the proposed Suez controls are acceptable by environmental authorities and adequately contain any leachate from subterranean or surface drainage line contamination. We</p>	
<p>Any additional future landfill proposal will require a specific Development Application to the Shire as well as approval of the DWER. Any such proposal will need to be considered by the Shire and DWER on its individual merits.</p> <p><i>Incentive for minimising/utilising waste stream resources:</i> As noted in the Planning Report, the WA State Government "Western Australian Waste Strategy" aims to significantly reduce the volume of Metropolitan waste diverted to landfill by up to 65% by 2020. The WA Waste Authority primarily achieves these targets through setting disposal fees on waste taken to landfill which provides a significant incentive to minimise landfill waste streams. Current recycling rates are at approximately 40% of the Municipal Waste Stream and increasing.</p> <p>It is important to note that notwithstanding the significant investment that has gone into re-cycling / re-use and reduction of the waste stream to landfill, there is a significant portion of the waste stream that cannot currently be recycled either physically or economically. WA's isolation creates further difficulties with respect to access to recycled product markets.</p> <p>In respect of the location of future landfills, DWER siting requirements effectively limit future landfills to areas south of the Metropolitan Region, the foot of the Darling Scarp or areas inland thereof.</p> <p><i>Leachate Containment and Odour:</i> <b>Refer Response to Item 5 in respect of Leachate Management and Refer Response to Item 7 in respect of Odour.</b></p> <p>Further, SUEZ has not received any complaints of odour from its current operations at the NBRRP.</p>		

10	<p>Greg Marston Chairman Boddington River Action Group <a href="mailto:grmharston.35@bigpond.com">grmharston.35@bigpond.com</a></p>	<p>have heard (direct, not Facebook!) of odour problems being experienced by landholders between Boddington and Culford.</p> <p>Boddington River Action Group with Friends of the Reserves and general community members (the latter by petition) all objected to the original Perth Waste plan to establish a waste disposal site for Perth rubbish on the Culford property in North Bannister. In 2011, the Shire went through due process and gave approval for rubbish disposal on Culford subject to meeting a variety of conditions, however we believe that social impact and Boddington community views should have been the prime consideration. Other Shires, including Wandering and York, have rejected similar proposals to dump Perth rubbish in their domain.</p> <p>Our concern for the Suez operation is where next after the Culford property can take no further rubbish from current or later expansion projects? The Boddington Shire has already set a precedent and will have greater difficulty in refusing the establishment of new properties for the purposes of dumping Perth waste. While country shires accept this external waste, there is no incentive for minimising/utilising waste stream resources. We acknowledge that this comes under</p>	<p><b>Refer Response to Item 9.</b></p>	<p>Noted. DWER will address various matters through the Works Approval and associated licencing.</p>
----	---	---	---	--

	<p>the banner of State and Federal Government agencies.</p> <p>Within the context of the subject line expansion plan for Culford, we can only hope that the proposed Suez controls are acceptable by environmental authorities and adequately contain any leachate from subterranean or surface drainage line contamination. We have heard (direct, not Facebook!) of odour problems being experienced by landholders between Boddington and Culford.</p>		
11	<p>Jim Dodds Executive Director Environmental Health Directorate Department of Health PO Box 8172, Perth Business Centre, Western Australia 6849</p>	<p>The DOH has no objection to the proposed footprint expansion provided consideration is given to the threat of natural disaster (e.g. fire).</p>	<p>The Applicant notes that there is no objection from the Department of Health and notes further the Bushfire Management Plan prepared for and submitted with the proposed Expanded Footprint Application.</p> <p><b>Refer Response to Item 1</b> in respect of Bushfire Management.</p>
12	<p>Kim Gorey Director AB No. 2 Pty Ltd at Culford Trust PO Box 662, Nedlands, WA 6009</p>	<p>AB No 2 has no comments or objections to the Development Application.</p>	<p>The Applicant notes that there is no objection from the Director of AB No2 Pty Ltd.</p>
13	<p>Jane O'Malley CEO Peel-Harvey Catchment Council 58 Sutton Street, Mandurah, WA 6210</p>	<p>The PHCC has reviewed the planning application and supporting documentation, including the Environmental Impact Assessment prepared by Golder Associates, along with review of the physical site characteristics. This has raised some significant concerns both in respect</p>	<p>Noted. Various conditions will limit off-site impacts. DWER will address various matters through the Works and Approval</p>

	<p>to the level of assessment of environmental assets, and the intended management proposed to mitigate potential risk.</p> <p>In particular these concerns relate to potential impacts to surface and groundwater, and fauna habitat due to the scale and location of the proposal. The assessment of the current quality and value of the physical environment outlined in the environment report is not sufficient to properly assess the risk. For example the flora survey wasn't conducted in the area of proposed clearing, and other assessments are desktop based only. Therefore, in the absence of sufficient information to provide confidence the proponent has adequately considered environmental risk as part of the proposal, the application should not be approved.</p> <p>Until relevant approvals are issued, there is little confidence that potential impacts to environmental assets can be managed to the expectation of assessment agencies and the PHCC.</p> <p>Therefore it is recommended that a decision on the Development Application be deferred until all necessary environmental approvals are in place.</p>	<p>the Public Environmental Review assessment process (the highest level of assessment) and referred to as a Consultative Environmental Review' at the time.</p> <p>The DWER has confirmed that the site of the NBRRP is an approved Class II &amp; Class III waste disposal site and is the subject of current Operating Licence.</p> <p>As an approved waste disposal site, SUEZ is only required under the Act to make application to the DWER – and has made application – to amend its current Operating Licence to expand the landfill into Cells 5 and 6 of the proposed Expanded Footprint.</p> <p>The DWER have recently requested additional information and, in particular, the submission of detailed design and construction drawings in order to further assess the application for Licence Amendment.</p> <p>The preparation of detailed plans is a significant undertaking and SUEZ has committed to providing the detailed plans to the Department by March 2018.</p> <p>SUEZ anticipates that the detailed design and construction drawings and additional information to be provided to the DWER will satisfy the DWER that the Expanded Footprint presents minimal environmental risk and enable the DWER to issue SUEZ an amended Licence to include Cells 5 &amp; 6 within the Expanded Footprint.</p> <p>The following addresses the specific issues raised by the Respondent.</p> <p><i>Impacts to Surface and Groundwater:</i>  <b>Refer Response to Item 7</b> in respect of Surface Water.  <b>Refer Response to Item 5</b> in respect of Groundwater.</p> <p><i>Impacts to Fauna Habitat:</i>  <b>Refer Response to Item 7</b> in respect of Flora and Fauna.</p> <p>The Planning Report and attached Appendices provide extensive assessment of the environmental assets as well as identified proposed</p>	<p>associated licencing.</p>
--	---	--	------------------------------



	<p>management measures in respect of a broad range of operational aspects of the proposed Expanded Footprint.</p> <p>Further, it is again noted that the site of the proposed Expanded Footprint is currently a Blue Gum Plantation and no indigenous flora will be cleared to accommodate the Footprint. There is accordingly no value in undertaking assessments of the values of the Plantation. It is further noted that initial desktop studies of flora and fauna were augmented by on-site surveys as discussed in Item 7.</p>		
14	<p>SUEZ / Larry Smith Planning</p> <p>Note : includes response from Bibbulmun Foundation</p> <p><b>Advice from Bibbulmun Track Foundation</b></p> <p>SUEZ has presented the proposed Footprint Expansion to the Board of the Bibbulmun Track Foundation (BTF) for their consideration and comment. The Board considered the proposed Expansion at its October 2017 Meeting and resolved to advise SUEZ that [Attachment I]:</p> <p>“... it offered no objection provided that the concerns originally raised by the Foundation continued to be addressed. Namely:</p> <ul style="list-style-type: none"> <li>• Maintain screening of the facility, and establish a ‘green wall’ along the western edge of the landfill cell to minimise visual impact from the Bibbulmun Track.</li> <li>• Progressive capping and planting of vegetation to take place as sections of the landfill are completed to minimise the visual impact from Boonerring Hill.</li> </ul>	<p>The Applicant notes that the Bibbulmun Track Foundation has raised no objection to the proposed Expanded Footprint subject to maintaining screening of the facility, progressive capping and revegetation and consideration of noise and smell impacts.</p>	Noted

	<ul style="list-style-type: none"> <li>• Consideration of noise and smell impacts.</li> </ul> <p>We understand that once this vegetation has been established the landfill will blend with the surrounding topography and visual impact will be minimal.”</p> <p>The BTF further advised that it has not received any complaints regarding the North Bannister Resource Recovery Park (NBRRP) operation from walkers.</p> <p><b>Risk of Pollution of Downstream Stock Water &amp; Runoff</b></p> <p>Concerns have been raised by a landowner to the south of the NBRRP in respect of the southerly flowing stream to the immediate east of the landfill footprint, the potential for the stream to be contaminated and the effect such contamination will have on watering of stock.</p> <p>The stream is an expression of the groundwater table and primarily flows in winter and spring. The groundwater flows in a general south-easterly direction. The groundwater quality is not suitable as potable supply but is acceptable for stock watering purposes.</p> <p>There are four potential sources of contamination of the stream by the landfill operation and specifically:</p>		
--	---	--	--

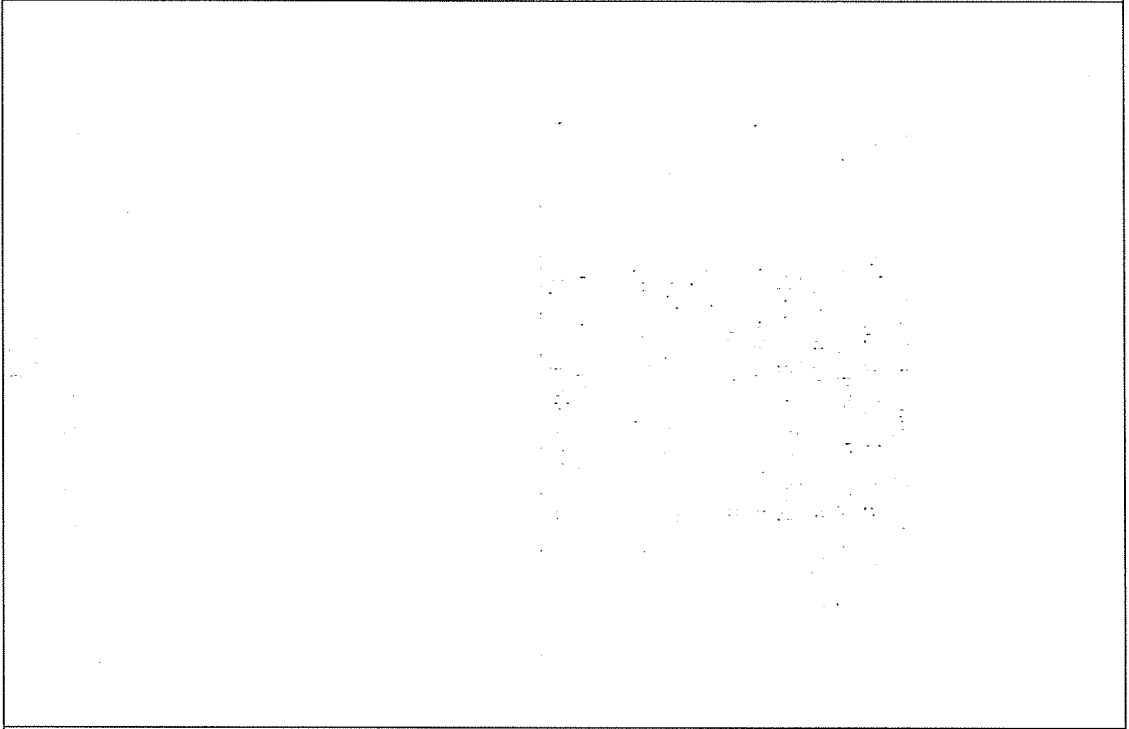
		<ul style="list-style-type: none"> <li>• Leachate moving into the groundwater below the landfill</li> <li>• Overflow of leachate from the holding / evaporation ponds</li> <li>• Contamination from the Composting Area</li> <li>• Fuel / chemical spills.</li> </ul> <p><i>Landfill Leachate:</i>  The NBRRP Landfill is highly engineered and conforms with DWER requirements for Class II &amp; III Landfills. The floor of the landfill cells within the current and expanded footprints will maintain a minimum two metre clearance to the groundwater, where necessary by the use of fill to raise the floor level of the landfill cell. As discussed at Section 7.2 of the Planning Report the landfill is designed and constructed to minimise the risk of any leachate moving into the groundwater system and comprises a series of lining layers as follows (from bottom to top):</p> <ul style="list-style-type: none"> <li>• A 500 mm low permeability material (typically clay), compacted and rolled to act as an attenuation layer and initial buffer.</li> <li>• A Geosynthetic Clay Liner (GCL) will be installed over the base of the landfill cells and on the side slopes between the base and the Liner. The GCL will have a hydraulic conductivity of less than <math>1 \times 10^{-9}</math> m/s. The GCL</li> </ul>		
--	--	---	--	--

		<p>will limit contaminant migration, water seepage and landfill gas migration in the unlikely event that the HDPE Liner is punctured.</p> <ul style="list-style-type: none"> <li>• A 2.0 mm thick High Density Polyethylene (HDPE) membrane liner will be placed directly above the GCL, to further mitigate the risk of contaminant migration and control landfill gas migration. All joints are heat welded on-site and tested for compliance.</li> <li>• A non-woven geotextile cushion layer is placed on top of the HDPE liner to serve as a protective layer, minimising the risk of damage or puncture during installation of the drainage layer and operation of the landfill.</li> <li>• A 300 mm aggregate layer will be laid on top of the cushion layer to act as a leachate drainage layer. The hydraulic conductivity of the drainage layer will be greater than 1 x 10<sup>-3</sup> m/s.</li> <li>• Leachate collection pipes will be installed at the base of the drainage layer.</li> <li>• A non-woven geotextile layer will be placed on top of the aggregate to serve as a separation layer from the waste.</li> </ul>		
--	--	--	--	--

		<p>Existing groundwater monitoring bores installed in 18 locations across and surrounding the existing and proposed landfill areas have been regularly sampled since 2011. Review of the groundwater quality database and field investigation show no evidence of contamination to groundwater at the existing landfill and proposed landfill extension site.</p> <p><i>Overflow of Leachate:</i> As discussed at Section 7.4 of the Planning Report, leachate generated within the landfill is extracted and pumped to lined leachate holding / evaporation ponds adjacent to the landfill.</p> <p>The leachate management system currently consists of one Leachate Pond (LP1) with a second Pond (LP3) nearing completion, both providing storage capacity for the landfill leachate. A third Leachate Pond (LP2) exists for the existing composting platform but is not utilised for landfill leachate.</p> <p>In addition a fourth Leachate Pond (LP4) will be constructed when the composting platform is expanded for containment of organics leachate only.</p> <p>The proposed management system for the leachate from the landfill involves extraction of leachate via a</p>
--	--	--

	<p>             pump system, which is then transferred to the landfill Leachate Ponds (LP1 and LP3).         </p> <p>             Leachate levels within the Ponds are closely monitored, particularly during winter. Freeboard levels are maintained at all times through recirculation over the active landfill cell and, in extreme events, tankering of leachate off-site to an approved liquid waste disposal facility.         </p> <p>             An automated leachate monitoring system is in the process of being installed to monitor and control the flow of leachate within the facility. Some of the features of this system include an intrinsically safe liquid level monitoring system with multiple layers of overflow protection, an automatic notification system to site personnel and automatic pump start up and shut down. There has not been an overflow event of the Leachate Ponds; including during the heavy rainfall events in early and mid-2017.         </p> <p>             Future Leachate Ponds for landfill leachate will be designed and constructed, as required, to the same rigor as the existing system based on the ongoing monitoring and modelling results. Site planning for the Expanded Footprint makes provision for an additional three Leachate Ponds if required - LP5 &amp;         </p>		
--	--	--	--

		<p>LP6 to the north of LP3 and LP7 to the south of the composting area. The leachate management strategy aims to reduce pond storage levels during the summer season to maximise available capacity for subsequent winter periods.</p> <p>Expansions to the leachate pond system for the landfill leachate will be designed to accommodate inflow from the following sources:</p> <ul style="list-style-type: none"> <li>• Leachate from the landfill sumps (leachate production is expected to reach a 'steady state' as old cells are capped and new cells are developed)</li> <li>• Contaminated run-off from the landfill cells</li> <li>• Incident rainfall on the leachate ponds</li> <li>• 1:100 yr ARI, 72 hr storm event</li> <li>• Leachate from the composting leachate ponds when the capacity of these ponds are exceeded (e.g. rainfall events equivalent or greater than 1:100 yr ARI, 72 hr events.)</li> <li>• Leachate from SUEZ's closed Shale Road Landfill.</li> </ul> <p>SUEZ is confident that leachate volumes can be adequately accommodated within the Leachate Pond system and that practical measures are in place to deal with extreme weather events.</p>		
--	--	---	--	--

		<p><i>Composting Area:</i>  SUEZ have lodged a separate development application with the Shire to increase the size and throughput of the green waste composting operation at the NBRRP from the current 35,000 tpa to 110,000 tpa.</p> <p>The composting operation is undertaken on sealed hardstand area, being a combination of bitumen hardstand and concrete with finished product to be held in lined concrete bunkers to minimise the risk of any leachates entering the groundwater system.</p> <p><i>Fuel / chemical spills:</i>  Fuels and chemicals are stored within appropriately sized concrete bunded areas to prevent movement outwards into the groundwater system in the event of a spill. Refuelling is conducted on a bunded hardstand area to likewise contain spillages.</p> <p>Given the above, it is considered that the risk of contamination of the southward flowing creek impacting stock watering requirements downstream is minimal.</p> <p><b>Inclusion of Tyre Storage Area</b>  The proposed Tyre Storage Area is for the purposes of the interim holding of tyres recovered from the incoming waste stream prior to</p>
--	---	---



	<p>transport to Perth for recycling. The storage area is hard surfaced and is not for the purposes of long term holding / disposal of tyres.</p> <p><b>Fugitive Roadside Litter</b></p> <p>SUEZ is conscious of the fugitive litter issue along Albany Highway and has been working progressively to address the problem since acquiring the NBRRP in mid-2016. Measures that SUEZ have initiated to address the matter are:</p> <p><i>SUEZ Waste Transfer Trailers:</i></p> <p>SUEZ utilises side tipping waste transfer trailers from its Transfer Stations at Landsdale and Welshpool and “walking floor” trailers from its Bibra Lake Transfer Station to transfer waste to the NBRRP. The trailers have a rollover canvas cover to prevent waste escaping.</p> <p>It became evident that the current covers were inadequate and SUEZ commenced modifying its fleet of trailers in early 2017 to improve waste containment and improve the roll-over canvas covers. In particular, the hydraulic arms of the trailers have been modified to accommodate longer and broader covers to provide greater overlap at the front, rear and sides of the trailer.</p> <p>Modification of the SUEZ trailer fleet is expected to be completed by</p>		
--	--	--	--

		<p>late 2017 and it is expected that the modifications will significantly reduce fugitive litter. Initial indications from the trailers that have been modified so far are encouraging. SUEZ will continue to monitor the operation of the modified trailers and will undertake further enhancements, as required, to ensure fugitive litter is minimised.</p> <p><i>2nd Party Waste Trailers:</i> SUEZ has established an inspection regime of 2nd Party waste trailers to ensure adequate cover of the load. Trailers that do not comply with SUEZ's requirements are banned from accessing the NBRRP until appropriate modifications have been undertaken and approved by SUEZ.</p> <p><i>Albany Highway Litter Collection:</i> SUEZ has instituted a Roadside Litter Collection Team and has completed collection of all roadside litter from the NBRRP entry road to the top of Bedfordale Hill (Canning Dam Rd). SUEZ will now commence a fortnightly litter patrol along the length of Albany Highway from Bedfordale Hill to the NBRRP Entry Road.</p> <p>Initial monitoring of Albany Highway from the entry road north to Bedfordale Hill indicates that measures taken to date in respect of the waste transfer trailers have been effective in reducing the fugitive</p>
--	--	--

	<p>litter with further improvements expected as the cover modifications to the balance of the waste trailer fleet are completed.</p> <p>Initial monitoring has indicated a fortnightly collection regime as likely to be adequate with the possibility of an increased interval as further litter containment measures come into effect.</p> <p><b>Fugitive Roadside Litter Management Plan</b></p> <p>While minimisable, SUEZ acknowledges that some fugitive roadside litter is unavoidable. In order to minimise the visual and amenity impacts of fugitive litter along Albany Highway, SUEZ will implement the following management regime.</p> <p>FUGITIVE ROADSIDE LITTER MANAGEMENT PLAN</p> <p><i>Waste Trailer Covers:</i></p> <ul style="list-style-type: none"> <li>• SUEZ and 2nd Party Waste Trailers shall be required to maintain an effective cover to minimise escape of litter during the transport of waste to the NBRRP. Waste Trailers that do not comply with SUEZ cover requirements will be prohibited from accessing the NBRRP.</li> <li>• SUEZ will inspect all trailers at least weekly, including 2nd</li> </ul>		
--	---	--	--

		<p>Party trailers, to ensure that the covering is not damaged to the extent where fugitive litter may result during transportation. Waste Trailers covers that are damaged will be prohibited from accessing the NBRRP until repair or replacement of the faulty cover has been undertaken.</p> <p><i>Loading of Waste Trailers:</i></p> <ul style="list-style-type: none"> <li>• As far as practical, light waste such as paper and plastics that may become airborne during transportation, shall be limited to the lower three-quarters of the waste trailer with denser waste placed on top to minimise the risk of escape of litter.</li> <li>• Following completion of loading, the surface of the waste will be tamped down as hard as practical to minimise the risk of escape of litter.</li> <li>• Each load will be inspected for any loose surface materials prior to departure.</li> </ul> <p><i>Roadside Litter Collection:</i></p> <ul style="list-style-type: none"> <li>• SUEZ will retain at the NBRRP site a Roadside Litter Collection Team to undertake on-going roadside collections on both a regular and ad-hoc basis in the event of an incident.</li> <li>• SUEZ will undertake fortnightly Litter Collection along the length</li> </ul>		
--	--	---	--	--

	<p>of Albany Highway from Bedforddate Hill to the NBRRP Entry Road.</p> <ul style="list-style-type: none"> <li>• SUEZ, in consultation with the Shire of Boddington, will review the frequency of the Roadside Litter Collection regime, initially every three months, to determine the effectiveness of the collection regime. SUEZ, with the agreement of the Shire, may increase or decrease the frequency of Roadside Litter Collection depending on the outcomes of monitoring over the previous quarter.</li> <li>• SUEZ will, as soon as practical and within 24 hours, respond with a Collection Team to a particular litter problem reported to it by the Shire of Boddington or to an incident litter spill from either its waste trailers or those of 2nd Parties.</li> </ul> <p><b>Odour; Aesthetics; Plants &amp; Wildlife and Atmosphere Impacts</b></p> <p>A Respondent to the Shire has sought information in respect of the above matters. In addition to the Planning Report, Attachment 2 prepared by SUEZ's Environmental Engineers – Golder Associates - provides a specific response to the concerns raised.</p> <p><b>Boddington River Action Group</b></p>		
--	--	--	--

	<p>The Boddington River Action Group have raised concerns in respect of the following matters:</p> <p>Shire has already set a precedent and will have greater difficulty in refusing the establishment of new properties for the purposes of dumping Perth waste – Approval of the proposed Expanded Footprint does not set a precedent for additional future landfills within the Shire. Any additional future landfill proposal will require a specific Development Application the Shire as well as approval of the DWER. Any such proposal will need to be considered by the Shire and DWER on its individual merits.</p> <p>While country shires accept this external waste, there is no incentive for minimising/utilising waste stream resources – As noted in the Planning Report, the WA State Government “Western Australian Waste Strategy” aims to significantly reduce the volume of Metropolitan waste diverted to landfill by up to 65% by 2020. The WA Waste Authority primarily achieves these targets through setting disposal fees on waste taken to landfill which provides a significant incentive to minimise landfill waste streams. Current recycling rates are at approximately 40% of the Municipal Waste Stream and increasing. Notwithstanding,</p>		
--	---	--	--

15	<p>Luc Cotte Senior Officer Department of Planning Lands and Heritage  PO Box 3153, East Perth, WA, 6892</p>	<p>there is a significant portion of the waste stream that cannot currently be recycled either physically or economically, with WA's isolation adding further difficulties with access to recycled product markets. In respect of the location of future landfills, DWER siting requirements effectively limit future landfills to areas south of the Metropolitan Region, the foot of the Darling Scarp or areas inland thereof.</p> <p>Leachate Containment and Odour – Part 2 above addresses the issue of leachate management. SUEZ has not received any complaints of odour from its current operations at the NBRP.</p> <p>A review of the Register of Places and Objects as well as the AHD's Aboriginal Heritage Database confirms that Lot 2 on Albany Highway, North Bannister does not intersect any known Aboriginal heritage places</p> <p>The DPLH recommends the proponent takes into consideration the State's Aboriginal Heritage Due Diligence Guidelines when planning specific developments associated with development proposals.</p> <p>Improvements to Albany Highway were completed as part of the previous development application for a waste management business by Perthwaste Pty Ltd.</p>	<p>The Applicant notes the Department of Planning Lands &amp; Heritage - Aboriginal Heritage Directorate advice that the proposed Expanded Footprint does not intersect any known Aboriginal heritage places.</p> <p>The Applicant also confirms that it will have procedures in place to identify any risks to Aboriginal heritage and to mitigate risk where heritage sites may be present.</p>	<p>Noted. An advice note is recommended.</p>
16	<p>Janet Hartley West Network Manager Main Roads Western Australia</p>	<p>The Applicant notes that Main Roads WA has determined that traffic associated with the proposed Expanded Footprint is unlikely to adversely affect Albany Highway.</p> <p>The Applicant also notes that it does not anticipate an increase in the number of trucks / waste trailers accessing the site.</p>	<p>The Applicant notes that Main Roads WA has determined that traffic associated with the proposed Expanded Footprint is unlikely to adversely affect Albany Highway.</p> <p>The Applicant also notes that it does not anticipate an increase in the number of trucks / waste trailers accessing the site.</p>	<p>Noted</p>

	<p>PO Box 333, Northam, WA 6401</p>	<p>The revised 'Traffic Impact Assessment' for the expanded footprint has not been provided as part of this application for Main Roads to assess the impact on Albany Highway. However, given that improvements have been completed as part of previous development Main Roads has determined that it is unlikely that it will adversely effect on Albany Highway.</p>		
17	<p>Department of Water and Environmental Regulation</p>	<p>Matters will be addressed in more detail at the Works Approval and licencing stages.</p>	<p>No comment given the submission was received late.</p>	<p>Noted</p>