



Licence number	L6882/1997/13
Licence holder	Shire of Esperance
Registered business address	77 Windich Street ESPERANCE WA 6450
DWER file number	INS-0001369
Duration	10/08/2011 to 31/01/2031
Date of issue	10/08/2011
Date of amendment	9/03/2026
Premises details	Wylie Bay Waste Management Facility 170 Wylie Bay Road BANDY CREEK WA 6450 Legal description - Lot 50 on Deposited Plan 411486 Certificate of Title Volume 2940 - Folio 919

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 13: Crushing of building material: premises on which building or demolition material (for example bricks, stones or concrete) is crushed or cleaned.	100,000 tonnes per annual period
Category 57: Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored	No more than 250 tyres
Category 62: Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use	5,000 tonnes per annual period
Category 64: Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled " <i>Landfill Waste Classification and Waste Definitions 2018</i> " published by the CEO and amended from time to time) is accepted for burial	50.000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 9 March 2026 by:

Stephen Checker

MANAGER WASTE INDUSTRIES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
31/07/2008	L6882/1997/12	Licence reissue
04/08/2011	L6882/1997/13	Licence reissue
14/03/2013	L6882/1997/13	Addition of monitoring requirements at additional bores. Future closure of the landfill in 2019 as proposed by the Shire of Esperance's Closure and Post Closure Management Plan for the site, submitted in July 2012
23/08/2013	L6882/1997/13	Extension of closure date of liquid waste facility to 31 December 2013
19/12/2013	L6882/1997/13	Extension of closure date of liquid waste facility to 30 June 2014
26/03/2015	L6882/1997/13	Addition of Categories 13 and 62. Inclusion of closure and rehabilitation phases 2-3. Conversion to new licence (REFIRE) format
29/04/2016	L6882/1997/13	Licence amendment for the extension of the Licence duration to 9 August 2025 as part of the implementation of the then DER's Guidance Statement: Licence Duration
15/03/2018	L6882/1997/13	Amendment Notice 1 for the extension of the asbestos burial area
03/08/2018	L6882/1997/13	Amendment Notice 2 for the extension of the landfill footprint area
02/10/2023	L6882/1997/13	Amendment Notice amalgamation and extension to landfill closure date. Extension of licence expiry.
9/03/2026	L6882/1997/13	Amendment to extend landfill operations, phase 2 capping completion date and licence expiry.

Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

General

1. Nothing in the licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
 - (a) pollution;
 - (b) unreasonable emission;
 - (c) discharge of waste in circumstances likely to cause pollution; or
 - (d) being contrary to any written law.
2. The licence holder shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.
3. The licence holder, except where storage is prescribed in condition 7, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.
4. The licence holder shall immediately recover or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
5. The licence holder shall:
 - (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the premises; and
 - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the premises¹.

Note 1: Note1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment

Premises operation

6. The licence holder shall only accept waste onto the premises if:
 - (a) It is of a type listed in Table 1;
 - (b) The quantity accepted is below any quantity limit listed in Table 1; and
 - (c) It meets any specification listed in Table 1.

Table 1: Waste acceptance

Waste type(s)	Quantity limit	Specification
Clean fill	No more than 50,000 tonnes per annual period for Category 64 activities	None specified ²
Inert waste type 1 for landfill		
Inert waste type 3		Must meet the acceptance criteria for Class II landfills as set out in the Landfill Definitions No Inert waste type 3 to be accepted after 31 December 2029

Waste type(s)	Quantity limit	Specification
Putrescible waste		None specified No Putrescible waste to be accepted after 31 December 2029
Green waste		Limited to green waste as defined in the Definitions table No Green waste to be accepted after 31 December 2029
Special waste type 1 ¹ (Asbestos)		None specified ²
Special waste type 2 ¹ (Biomedical and clinical waste)		None specified ²
Contaminated solid waste		Must be supported by documentation that demonstrates compliance with the acceptance criteria for Class II landfills as defined in the Landfill Definitions
Quarantine waste		No liquid quarantine waste shall be accepted to the premises
Inert waste type 1 for crushing	No more than 100,000 tonnes per annual period for Category 13 activities	Waste containing visible asbestos or asbestos containing material shall not be crushed
Inert waste type 2 (Used tyres only)	No more than 250 tyres are stored within the premises boundary for Category 57 activities	Tyres are not to be buried at the landfill. To be accepted to the area depicted in Figure 3, Schedule 1.
e-waste	No more than 5,000 tonnes per annual period for Category 62 activities	To be accepted to the area depicted in Figure 3, Schedule 1
mattresses		To be accepted to the area depicted in Figure 3, Schedule 1
gas bottles		Degassed prior to acceptance at the premises. To be accepted to the area depicted in Figure 3, Schedule 1
batteries		To be accepted to the area depicted in Figure 3, Schedule 1
fluorescent globes and tubes		To be accepted to the area depicted in Figure 3, Schedule 1
General recyclables - cardboard, glass, aluminium and plastics.		To be accepted to the area depicted in Figure 3, Schedule 1
Bicycles, cars, steel, white goods		To be accepted to the area depicted in Figure 4, Schedule 1
Waste Oil		To be accepted to the area depicted in Figure 3, Schedule 1
Oil filters		To be accepted to the area depicted in Figure 3, Schedule 1

Waste type(s)	Quantity limit	Specification
Waste Cooking Oil		To be accepted to the area depicted in Figure 3, Schedule 1

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and used tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*

Note 2: This waste type is not subject to a date for the cessation of acceptance for disposal by landfilling

7. The licence holder shall ensure that waste accepted onto the premises are only subjected to the process(es) set out in Table 2 and in accordance with any process limits described in that table.

Table 2: Waste processing

Waste type(s)	Process	Process limits ^{1, 2}
Clean fill	Receipt, handling, and disposal by landfilling	<ul style="list-style-type: none"> Landfilling shall only take place within the landfill area shown on the Landfill Area Map in Schedule 1. No waste shall be temporarily stored or landfilled within 35 m from the boundary of the premises. The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m. Any waste emanating from the active landfill area is collected and returned to the tipping area on a weekly basis. Burning of green waste only No inert waste type 3, putrescible waste or greenwaste to be buried after 31 December 2029 Storage only in areas as depicted in Figures 3 and 4 in Schedule 1
Inert waste type 1 for landfill		
Inert waste type 3		
Contaminated solid waste		
Putrescible waste	Receipt, handling, and disposal by landfilling or burning ¹	<ul style="list-style-type: none"> Any waste emanating from the active landfill area is collected and returned to the tipping area on a weekly basis. Burning of green waste only No inert waste type 3, putrescible waste or greenwaste to be buried after 31 December 2029 Storage only in areas as depicted in Figures 3 and 4 in Schedule 1
Green waste		
Special waste type 1 ² (Asbestos)	Receipt and disposal by landfilling	<ul style="list-style-type: none"> The disposal area(s) for asbestos material shall be defined by grid references on a site plan; Not to be deposited within 2m of the final tipping surface of the landfill; and No works shall be carried out on the landfill that could lead to a release of asbestos fibres

Waste type(s)	Process	Process limits ^{1, 2}
Special waste type 2 ² (Biomedical and clinical waste)	Receipt, handling, and disposal by landfilling	<ul style="list-style-type: none"> • Only to be disposed of into a designated disposal area(s) defined by grid references on the site plan; • Not to be deposited within 2m of the final tipping surface of the landfill; • Disposed of to an area only accessible to authorised personnel; and • No works shall be carried out on the landfill that could lead to biomedical wastes being excavated or uncovered
Quarantine waste	Receipt, handling, and disposal by landfilling	<ul style="list-style-type: none"> • Dispatched to the landfill by a biosecurity officer or a party that has been accredited to carry out the transport of quarantine waste to the site • Handled and disposed in accordance with biosecurity requirements
Inert waste type 1 for crushing	<ul style="list-style-type: none"> • Receipt, handling, and storage of waste prior to treatment • Mechanical treatment consisting only of crushing and screening • Storage of processed materials 	<ul style="list-style-type: none"> • Waste shall only be stored within a designated storage area provided with dust control measures • Treated materials shall only be stored within designated locations provided with dust control measures • Storage only in areas as depicted in Figure 4 in Schedule 1
Inert waste type 2 (Used tyres only)	Receipt, handling, storage and disposal	<ul style="list-style-type: none"> • No more than 250 tyres shall be stored at any one time • No tyres or burnt tyres are to be buried at the premises • Tyres shall be stored at the Designated Bulk Waste Processing and Stockpiling Area as depicted in Schedule 1 • Tyres shall be removed by a licensed Controlled Waste carrier and disposed of offsite • Storage only in areas as depicted in Figure 3 in Schedule 1
e-waste	Receipt, handling and storage prior to removal off-site	To be stored in a cage or sea container as depicted in Figure 3, Schedule 1
mattresses		To be stored in a skip bin on a hardstand area as depicted in Figure 3, Schedule 1
gas bottles		To be stored in a cage as depicted in Figure 3, Schedule 1

Waste type(s)	Process	Process limits ^{1, 2}
batteries		To be stored in stillage bins on bunded pallets as depicted in Figure 3 in Schedule 1
fluorescent globes and tubes		To be stored in stillage bins as depicted in Figure 3 in Schedule 1
General recyclables - cardboard, glass, aluminium and plastics.		To be stored within the materials recycling facility as depicted in Figure 3, Schedule 1
Bicycles, cars, steel, white goods		To be stored on hardstands as depicted in Figure 4 in Schedule 1
Waste Oil		Directed to a bunded receival tank on a hardstand as depicted in Figure 3 in Schedule 1
Oil filters		To be stored in storage pods on a pallet as depicted in Figure 3 in Schedule 1
Waste Cooking Oil		Directed to a receival drum on a bunded pallet or hardstand as depicted in Figure 3 in Schedule 1

Note 1: Requirements for the burning of green waste are set out in the *Environmental Protection (Rural Landfill) Regulations 2002*.

Note 2: Requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

8. The licence holder shall visually inspect all Inert Waste Type 1 designated for crushing on arrival at the premises, and again before it enters any stockpile or treatment process to ensure that it complies with the waste acceptance criteria in Table 1.
9. The licence holder shall ensure that where waste does not meet the waste acceptance criteria set out in condition Table 1, it is removed from the premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility within 7 days of unloading.
10. The licence holder shall manage the landfilling activities to ensure:
 - (a) the size of the tipping face is kept to a minimum and not larger than 30 m x 30 m;
 - (b) waste is levelled and compacted to ensure all faces are stable and capable of retaining rehabilitation material;
 - (c) that at no time the active landfill area has an exposed face exceeding 2 m in vertical height;
 - (d) waste is covered as soon as possible after it is discharged and not later than by the end of the working day;
 - (e) rehabilitation of a cell or phase takes place within 12 months after disposal in that cell or phase has been completed; and
 - (f) waste is covered with a final soil cover of at least 1 m.
11. The licence holder shall ensure that cover is applied and maintained on landfilled waste in accordance with Table 3, and that sufficient stockpiles of cover are

maintained on site at all times.

Table 3: Cover requirements

Waste type(s)	Material	Depth	Timeframes
Special waste type 1 (Asbestos)	Inert waste type 1, clean fill or soil	1,000 mm for Inert waste type 1 and clean fill; or 300 mm for soil	As soon as practicable after deposit, prior to compaction
Special waste type 2 (Biomedical and clinical waste)	Clean fill or soil	300 mm	As soon as practicable after deposit

12. The licence holder shall implement the following security measures at the site:
 - (a) erect and maintain suitable fencing to prevent unauthorised access to the site as far as is practicable;
 - (b) ensure that any entrance gates to the premises are securely locked when the premises are unattended; and
 - (c) undertake regular inspections of all security measures and repair damage as soon as practicable.
13. The licence holder shall install and maintain a sign at the entrance to the premises which clearly displays the following information:
 - (a) hours of operation;
 - (b) contact telephone number;
 - (c) a warning indicating penalties for people lighting fires; and
 - (d) list of materials accepted for recycling and disposal and the location of where they can be deposited on the premises.
14. The licence holder shall take all reasonable and practical measures to ensure that no windblown waste escapes from the premises and that windblown waste is collected on at least a weekly basis and returned to the tipping area or appropriately contained.
15. The licence holder shall ensure that vermin, birds, flies, and other insects do not give rise to nuisance at the premises or in the immediate area of the premises.
16. The licence holder shall ensure that the asbestos content of any recycled output originating from construction and demolition waste does not exceed the contamination limits specified in Table 4.

Table 4: Recycled output contamination limits

Output	Parameter	Limit
Recycled drainage rock	Asbestos in any form	0.001% w/w
Recycled sand		
Recycled road base		

17. The licence holder shall ensure that recycled outputs originating from construction and demolition waste are sampled and tested in accordance with requirements set out in Table 5.

Table 5: Recycled output sampling and testing

Output	Parameter	Limit	Method
Recycled sand	Asbestos in any form	0.001% w/w	In accordance with the DWER Asbestos Guidelines as outlined in Schedule 2
Recycled road base			

18. The licence holder shall ensure that used tyres stored in the open are arranged such that any tyres or tyre storage area is:
- (a) 6 m from any combustible material, wall, building or fence in rows;
 - (b) stored on ground level;
 - (c) at least 35 m from the premises boundary; and
 - (d) accessible for fire fighting equipment.
19. The licence holder shall ensure that individual tyre stacks are separated at least 6 m from each other and do not exceed:
- (a) 100 square metres (100 m²) in area; and
 - (b) 3 m in height.
20. The licence holder shall ensure that all tyres are stacked on a non-combustible surface on their sides or if stored upright on their treads, are baled together with a securing device made from non-combustible materials.
21. The licence holder shall maintain the tyres in a tyre storage catchment area free of any accumulated storm water at all times.
22. The licence holder shall install and maintain a capping system on each waste cell in accordance with the requirements of Table 6.

Table 6: Cell capping requirements

Cell number(s)	Specification
Phases 1, 2 and 3 as depicted in Schedule 1	To meet capping system design as specified in Section 4 of the <i>Closure and Post Closure Management Plan and the Shire Response to Draft License L6882/1997/13</i> . The capping system shall achieve a coefficient of permeability of $\leq 1 \times 10^{-9}$ m/sec

23. The licence holder shall, prior to the completion of each Phase, install and operate a system for controlling landfill gas generated on the premises to prevent lateral migration of landfill gas outside the premises boundary.
24. The licence holder shall provide for the maintenance, monitoring, and operation of the landfill gas extraction system once constructed.
25. In the event that Special Waste Type 1 (ACM) is identified as excavated or uncovered during Phase 2 or 3 of capping works, the licence holder shall:

- (a) Immediately restrict public access to the premises until such time as the ACM has been re-covered;
 - (b) Minimise further handling of the waste as far as practicable;
 - (c) Not re-dispose ACM within two metres of any final surface level at the premises;
 - (d) Take preventative measures to minimise the release of asbestos fibres including but not limited to measures such as:
 - (i) wet down ACM prior to handling; and
 - (ii) use shelter or install wind barriers.
 - (e) Maintain a register of ACM disturbance during the rehabilitation and closure at the premises which shall include:
 - (i) a plan showing the position of ACM disturbed at the premises;
 - (ii) details of the disturbed ACM including whether it is friable or non-friable, type, condition and the estimated quantity to be handled;
 - (iii) the date of the disturbance;
 - (iv) the name of the person that discovered the waste; and
 - (v) the burial location of the ACM.
- 26.** In the event that Special Waste Type 2 (Biomedical and Clinical Waste) is identified as excavated or uncovered during the Phase 2 or 3 of capping works, the licence holder shall:
- (a) Immediately restrict public access to the premises until such time as the waste has been re-covered;
 - (b) Minimise further handling of the waste as far as practicable;
 - (c) Not re-dispose Special Waste Type 2 within two metres of any final surface level at the premises;
 - (d) Maintain a register of Special Waste Type 2 disturbance during the rehabilitation; and
 - (e) closure at the premises which shall include:
 - (i) a plan showing the position of Special Waste Type 2 disturbed at the premises;
 - (ii) the date of the disturbance;
 - (iii) the name of the person that discovered the waste; and
 - (iv) the type and burial location of the Special Waste Type 2.
- 27.** The licence holder shall undertake maintenance and repair, if identified as required (including through the monitoring listed in Table 8), of the closure and rehabilitation infrastructure including but not limited to:
- (a) Earthworks to restore or re-profile the landfill cap;
 - (b) Revegetation and/or weed control on the landfill cap;
 - (c) Repairs to the surface water management system and maintenance that ensures it is free from sediment, debris and vegetation;
 - (d) Repairs to the landfill gas management infrastructure; and
 - (e) Repairs to groundwater monitoring bores.

Emissions

General

28. The licence holder shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of any condition of this licence.

Point source emissions to air

29. The licence holder shall ensure that where waste is emitted to air from the emission points in Table 7, and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

Table 7: Emission points to air

Emission point reference	Emission point reference on map of emission points	Emission point	Source (including any abatement)
A1 – A30	1-30	Spiromatic cowls	Landfill gas

Fugitive emissions

30. The licence holder shall use all reasonable and practical measures to prevent and, where that is not practicable, to minimise dust emissions from the premises.
31. The licence holder shall ensure that no visible dust generated by the activities on the premises crosses the premises boundary.
32. The licence holder shall ensure that in the event that visible dust from operations relating to the crushing of building material is discharged beyond the boundary of the premises:
- all operations on the premises relating to the crushing of building material or the transfer or disturbance of crushed building material except for dust suppression operations cease; and
 - the operations outlined in condition 32(a) above do not recommence until measures have been put in place to prevent the reoccurrence of the discharge.

Odour

33. The licence holder shall ensure that odour emitted from the premises does not unreasonably interfere with the health, welfare, convenience, comfort, or amenity of any person who is not on the premises.

Monitoring

34. The licence holder shall ensure that:
- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and

- (c) all laboratory samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured unless indicated otherwise in relevant table.
35. The licence holder shall ensure that:
- (a) quarterly monitoring is undertaken at least 45 days apart; and
 - (b) six monthly monitoring is undertaken at least 5 months apart.
36. The licence holder shall ensure that all monitoring equipment used on the premises to comply with the conditions of this licence is calibrated in accordance with the manufacturer’s specifications.
37. The licence holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.
38. The licence holder shall undertake the monitoring in Table 8 according to the specifications in that table.

Table 8: General monitoring

Attribute	Monitoring method	Frequency	Duration
Landfill gas management system (once installed)	Recorded visual inspection of landfill gas management system infrastructure by suitably qualified personnel with demonstrated competence in landfill management	Monthly and following any 1 in 100-year 72-hour duration storm event	First year following capping works
		Quarterly and following any 1 in 100-year 72-hour duration storm event	Ongoing
Surface water management once installed	Recorded visual inspection of surface water management system infrastructure by suitably qualified personnel with demonstrated competence in landfill management	Six-monthly and following any 1 in 100-year 72-hour duration storm event	Ongoing
		Recorded visual inspection of cap integrity by suitably by qualified personnel with demonstrated competence in landfill management	Monthly and following any 1 in 100-year 72-hour duration storm event
	Recorded visual inspection of cap integrity by suitably by qualified personnel with demonstrated competence in landfill management	Quarterly and following any 1 in 100-year 72-hour duration storm event.	Ongoing

Attribute	Monitoring method	Frequency	Duration
	Recorded survey of site topography	Annually	Ongoing
Revegetation, weed and Erosion control on cap once installed	Recorded visual inspection by suitably qualified personnel with demonstrated competence in flora surveying. Inspections to Include: <ul style="list-style-type: none"> line-intercept method along transects; and photographic monitoring 	Six-monthly (Spring and Autumn)	First 2 years of works
		Annually or six-monthly if required based on revegetation, weed control and erosion control success as determined by suitably qualified personnel with demonstrated competence in flora surveying	Ongoing

39. The licence holder shall undertake the monitoring in Table 9 according to the specifications in that table.

Table 9: Monitoring of inputs and outputs

Input/Output	Parameter	Units	Frequency
Waste inputs	All approved waste types as set out in column 1 of Table 1, or as described in the Landfill Definitions	m ³	Each load accepted onto the premises.
Waste outputs	<ul style="list-style-type: none"> Waste type (as described in the Landfill Definitions) Date of removal from premises Intended destination of recycled materials produced at the premises (recycled drainage rock, recycled sand, and recycled road base) 		Each load leaving or rejected from the premises

40. The licence holder shall undertake the monitoring in Table 10 according to the specifications in that table.

Table 10: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter ^{1, 2}	Units	Averaging period	Frequency
Bores WBL1, WBL4, WBL6, WBL7, WBL9, WBL20, WBL28, and WBL29 WBL29a, WBL29b, WBL20a and WBL20b as depicted in Schedule 1 And any additional bores constructed in accordance with condition 42.	Standing water level (SWL)	m(AHD)	Spot sample	Quarterly
	pH	-		
	Electrical conductivity	µs/cm		
	Total dissolved solids (TDS)	mg/l		
	redox potential			
	chloride			
	sulfate			
	sodium			

Monitoring point reference and location	Parameter ^{1, 2}	Units	Averaging period	Frequency
	potassium			
	calcium			
	magnesium			
	bicarbonate			
	Biochemical oxygen demand (BOD).			
	Total nitrogen			
	Ammonia			
	Nitrate			
	Total phosphorus			
	Phosphate			
Bores WBL1, WBL4, WBL6, WBL7, WBL9, WBL20, WBL28, and WBL29 WBL29a, WBL29b, WBL20a and WBL20b as depicted in Schedule 1 And any additional bores constructed in accordance with condition 42.	Aluminium Arsenic Cadmium Cadmium Chloride Chromium Copper Iron Lead Manganese Mercury Nickel Potassium Zinc monoaromatic hydrocarbons (BTEX) total recoverable hydrocarbons (TRH) Polyaromatic hydrocarbons (PAH) organochlorine pesticides organophosphate pesticides	mg/L	Spot sample	Six-monthly
Bores WBL1, WBL4, WBL6, WBL7, WBL9, WBL20, WBL28, and WBL29 WBL29a, WBL29b, WBL20a and WBL20b as depicted in Schedule 1 And any additional bores constructed in accordance with condition 42.	PFAS: Perfluorooctane sulfonate (PFOS), Perfluorooctanoic acid (PFOA), 6:2 Fluorotelomer sulfonate (6:2 FTS), 8:2 Fluorotelomer sulfonate (8:2 FTS), Perfluoroheptanoic acid (PFHpA), Perfluorobutane	µ/L	Spot sample	Six-monthly

Monitoring point reference and location	Parameter ^{1, 2}	Units	Averaging period	Frequency
	sulfonate (PFBS), Perfluorobutanoic acid (PFBA), Perfluorohexanoic acid (PFHxA) Perfluorohexanoic sulfonate (PFHxS), Perfluoropentanoic acid (PFPeA)			

Note 1: SWL shall be determined prior to collection of other water samples.

Note 2: Electrical conductivity, pH and redox potential are permitted to be measured in the field in accordance with Australian Standard 5667

Specified Actions

41. The Licence Holder must prepare and submit to the CEO by 31 December 2029- an updated Closure and Post Closure Management Plan (CPCMP) which aligns with licence conditions that specify the timeframes for completion of capping
42. The Licence Holder must prepare and submit to the CEO by 31 December 2029 a review of the current groundwater monitoring bore network that includes but is not limited to:
 - (a) Available data on the construction details of all monitoring wells at the premises and commentary on the likelihood that construction methodologies have impacted groundwater monitoring results
 - (b) A review of the appropriateness of the current monitoring network ability to
 - (i) identify radial migration of groundwater flow immediately adjacent to the northern boundary of the landfill
 - (ii) provide sufficient spatial distribution and understanding of the movement of PFAS through the groundwater system and potential risks from PFAS to the marine environment specifically near WBL28
 - (iii) assess groundwater conditions in the locations of WBL4, 6 and 7.
 - (c) Where 42 (b) indicates that new groundwater bores are required, a timeline for completion of construction of these bores in accordance with Table 11.
43. The licence holder must not depart from the works specifications in Table 11 except:
 - (a) where such departure is minor in nature and does not materially change or affect the infrastructure; or
 - (b) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment;
 and all other conditions in this licence are still satisfied.

Table 11: Works specifications

Infrastructure	Specifications (design and construction)
Any new groundwater bores installed in accordance with condition 42	<p><u>Well design and construction:</u> Designed and constructed in accordance with ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores. Well screens must target the part, or parts, of the aquifer most likely to be affected by contamination (refer to Section 8 of Schedule B2 of the Assessment of Site Contamination NEPM for guidance on well screen depth and length.) Where temporary/seasonal perched features are present, wells must be nested, and the perched features individually screened.</p> <p><u>Logging of borehole:</u> Soil samples must be collected and logged during the installation of the monitoring wells. A record of the geology encountered during drilling must be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS1726. Any observations of staining / odours or other indications of contamination must be included in the bore log.</p> <p><u>Well construction log:</u> Well construction details must be documented within a well construction log to demonstrate compliance with ASTM D5092/D5092M-16. The construction logs shall include elevations of the top of casing position to be used as the reference point for water-level measurements, and the elevations of the ground surface protective installations.</p> <p><u>Well development:</u> All installed monitoring wells must be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the well screen to ensure the hydraulic functioning of the well. A detailed record should be kept of well development activities and included in the well construction log.</p> <p><u>Installation survey:</u> the vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor.</p> <p><u>Well network map:</u> a well location map (using aerial image overlay) must be prepared and include the location of all monitoring wells in the monitoring network and their respective identification numbers.</p>
Landfill capping Phase 2	The Licence Holder must complete Phase 2 capping by 31 December 2030

44. The licence holder shall submit a CQA Report to the CEO within 30 days following the completion of each works carried out in accordance with Table 11

Records and reporting

45. The licence holder must maintain accurate and auditable books that include the following records, information, reports, and data required by this licence:
- (a) the calculation of fees payable in respect of this licence;
 - (b) the works conducted in accordance with conditions 23, 25 and 26 of this licence;
 - (c) any maintenance of infrastructure that is performed in the course of complying with condition 27 of this licence;
 - (d) monitoring programmes undertaken in accordance with conditions 38, 39 and 40 of this licence; and
 - (e) complaints received under condition 48 of this licence.

- 46.** The books specified under condition 45 must:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the licence holder for the duration of the licence; and
 - (d) be available to be produced to an inspector or the CEO as required.
- 47.** The licence holder shall ensure that:
- (a) any person left in charge of the premises is aware of the conditions of the licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the premises is informed of all of the conditions of the licence that relate to the tasks which that person is performing.
- 48.** The licence holder must:
- (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period, and
 - (b) prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 1 March each year.
- 49.** The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- 50.** The licence holder shall maintain a register of quarantine waste and Special Waste Types 1 and 2 disposed of at the premises which shall include a plan showing the position of Special Waste Types 1 and 2 disposed of at the premises.
- 51.** The licence holder shall implement and maintain a system which ensures that a record is made of rejected loads, including details of the waste producer, waste carrier, registration number of the vehicle and the date and reason for rejection.
- 52.** The licence holder must submit to the CEO by no later than 90 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 12, and which provides information in accordance with the corresponding requirement set out in Table 12.

Table 12: Annual environmental report

Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 1	Record of the number of tyres stored on site each week	
Table 1 and Condition 51	Record of waste transport certificates for the previous annual period	
Table 2	Summary of current and future landfilling practices	
Table 8	Rehabilitation monitoring	
Table 9	Inputs and outputs	
Table 10	Monitoring results for all parameters	Raw data of all parameters to be provided in an excel spreadsheet as an attachment to the Annual Report
48	Compliance	Annual Audit Compliance Report (AACR) form ¹
49	Complaints summary	None specified
50	Copy of site plan marked with the location/s used for quarantine waste, Special Waste Type 1 and 2 disposal	None specified

Note 1: Available on Department website.

- 53.** The licence holder shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under condition 36; and
 - (b) an assessment of the information contained within the report against previous monitoring results and licence limits and/or targets.
- 54.** The licence holder shall ensure that the parameters listed in Table 13 are notified to the CEO in accordance with the notification requirements of the table.

Table 13: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement	Format or form
28	Breach of any limit specified in the licence	As soon as practicable but no	None specified
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution.	later than 5pm of the next usual working day.	

Note: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Definitions

In this licence, the terms in Table 14 have the meanings defined.

Table 14: Definitions

Term	Definition
ACN	Australian Company Number
Act	means the <i>Environmental Protection Act 1986</i>
active landfill area	means the landfilling area within the premises boundary which has been and is being used for the burial of waste (as depicted in Schedule 1)
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12-month period commencing from 1 January until 31 December of the same year
asbestos	means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysolite, crocidolite, tremolite and any mixture containing 2 or more of those
asbestos containing material (ACM)	has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2021)
asbestos fibres	has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2021)
asbestos fines	has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009)
Assessment of Site Contamination NEPM	means the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended from time to time
AS1726	means the Australian Standard AS1762 Geotechnical site investigations, as amended from time to time
ASTM D5092/D5092M-16	means the ASTM international standard for Standard practice for design and installation of groundwater monitoring wells (Designation: ASTM D5092/D5092M-16), as amended from time to time.

Term	Definition
AS/NZS667.1.1998	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.11 1998	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i>
ASTM D5092-04(2010)e1	means the ASTM International standard for Standard practice for design and installation of groundwater monitoring wells
averaging period	means the time over which a limit or target is measured, or a monitoring result is obtained
biannually	means the 2 inclusive periods from 1 April to 31 May and 1 September to 31 October
BTEX	means benzene, toluene, ethylbenzene, and xylenes
books	as defined in section 3 of the Interpretations Act 1984 and section 3 of the Environmental Protection Act 1986
CEO	means Chief Executive Officer of the Department. “submit to / notify the CEO” (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
clean fill	has the meaning defined in Landfill Definitions
Closure and Post Closure Management Plan	means the document developed for the Wylie Bay Waste Management Facility entitled “Closure and Post-Closure Management Plan”, prepared for the Shire of Esperance by Talis Consultants, November 2018 (DWER reference DWERDT718269)
construction and demolition waste	has the meaning defined in Landfill Definitions
code of practice for the storage and handling of dangerous goods	means the document titled “Storage and handling of dangerous goods: Code of Practice” published by the Department of Mines and Petroleum, as amended from time to time
combustible material	means any material that is capable of readily catching fire if heated or otherwise exposed to an external flame

Term	Definition
controlled waste	has the definition in <i>Environmental Protection (Controlled Waste) Regulations 2004</i>
dangerous goods	has the meaning defined in the <i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007</i>
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994 (WA)</i> and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
Department of Health Asbestos Guidelines'	means the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2021)
discharge	has the same meaning given to that term under the EP Act
DWER Asbestos Guidelines	means document titled " <i>Guidelines for managing asbestos at construction and demolition waste recycling facilities</i> " April 2021, published by the Department of Water and Environmental Regulation (as amended from time to time)
emission	has the same meaning given to that term under the EP Act
environmentally hazardous material	<p>means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products, and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm.</p> <p>Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines, Industry Regulation and Safety</p>
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
fugitive emissions	means all emissions not arising from point sources identified in Table 7
green waste	biodegradable waste comprising plants and their component parts such as flower cuttings, hedge trimmings, branches, grass, leaves, plants, seeds, shrub, and tree loppings, tree trunks, tree stumps and similar materials and includes any mixture of those materials
Inert Waste Type 1	has the meaning defined in Landfill Definitions;
Inert Waste Type 2	has the meaning defined in Landfill Definitions

Term	Definition
Inert Waste Type 3	has the meaning defined in Landfill Definitions
Landfill Definitions	refers to the <i>Landfill Waste Classification and Waste Definitions 1996</i> (As amended December 2018), published by the CEO and as amended from time to time
landfill gas	means gas generated from the decomposition of waste containing a mixture of methane, carbon dioxide and other gases
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted
mg/L	means milligram per litre
NATA	means the National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
PFAS	means perfluoroalkyl and polyfluoroalkyl substances; PFAS are a family of manufactured chemicals which do not occur naturally in the environment. Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are two of the most well-known PFAS and are contaminants of emerging concern in Australia and international
Phase	means Phases 1 through to 3 inclusive as described in the Closure and Post Closure Management Plan and depicted in Schedule 1 Figure 6
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence
prescribed premises	has the same meaning given to that term under the EP Act
putrescible	has the meaning defined in Landfill Definitions
quarterly	means the 4 inclusive periods from 1 January to 28 February, 1 April to 31 May, 1 July to 30 August and 1 October to 30 November

Term	Definition
quarantined storage area or container'	means a hardstand storage area or sealed-bottom container that is separate and isolated from authorised waste disposal areas and is capable of containing all non-conforming waste and its constituents, these areas must be clearly marked and their access restricted to authorised personnel
quarantine waste	means material from a foreign region or country that is capable of being host to insects, helminths or other parasites, disease, weeds or any other organisms that are not existent or prevalent in this country and pose a potential threat to local ecosystems, people or local plant or animal industries. Quarantine Waste may include: (a) material used to pack and stabilise imported goods; (b) galley food and any other waste brought into Australia; (c) animal or plant waste brought into Australia; (d) refuse or sweepings from a hold of an overseas vessel; (e) any other waste or other material, which comes into contact with quarantine waste; (f) contents of airport biosecurity amnesty bins and (g) articles seized by biosecurity officers and/or not collected by clients.
rehabilitation	means the completion of the engineering of a landfill cell and includes capping and/or final cover
Schedule 1	means Schedule 1 of this licence unless otherwise stated
Schedule 2	means Schedule 2 of this Licence unless otherwise stated
Shire Response to Draft License L6882/1997/13	means the document developed for the Wylie Bay Sanitary Landfill Site entitled "Talis Ref: TW13003 – Draft License Response", prepared for the Shire of Esperance by Talis Consultants, 9 March 2015
Special Waste Type 1	has the meaning defined in Landfill Definitions
Special Waste Type 2	has the meaning defined in Landfill Definitions
Spot sample	means a discrete sample representative at the time and place at which the sample is taken
standing water level (SWL)	means the water level of any surface water or in any piezometer measured prior to sampling and expressed in metres AHD
tipping area	means the area of the landfill in which waste other than Clean Fill is being deposited

Term	Definition
usual working day	means 0800 – 1700 hours, Monday to Friday, excluding public holidays in Western Australia
waste	has the same meaning given to that term under the EP Act
w/w	Means weight for weight

END OF CONDITIONS

Schedule 1

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).



Figure 1: Map of the boundary of the prescribed premises

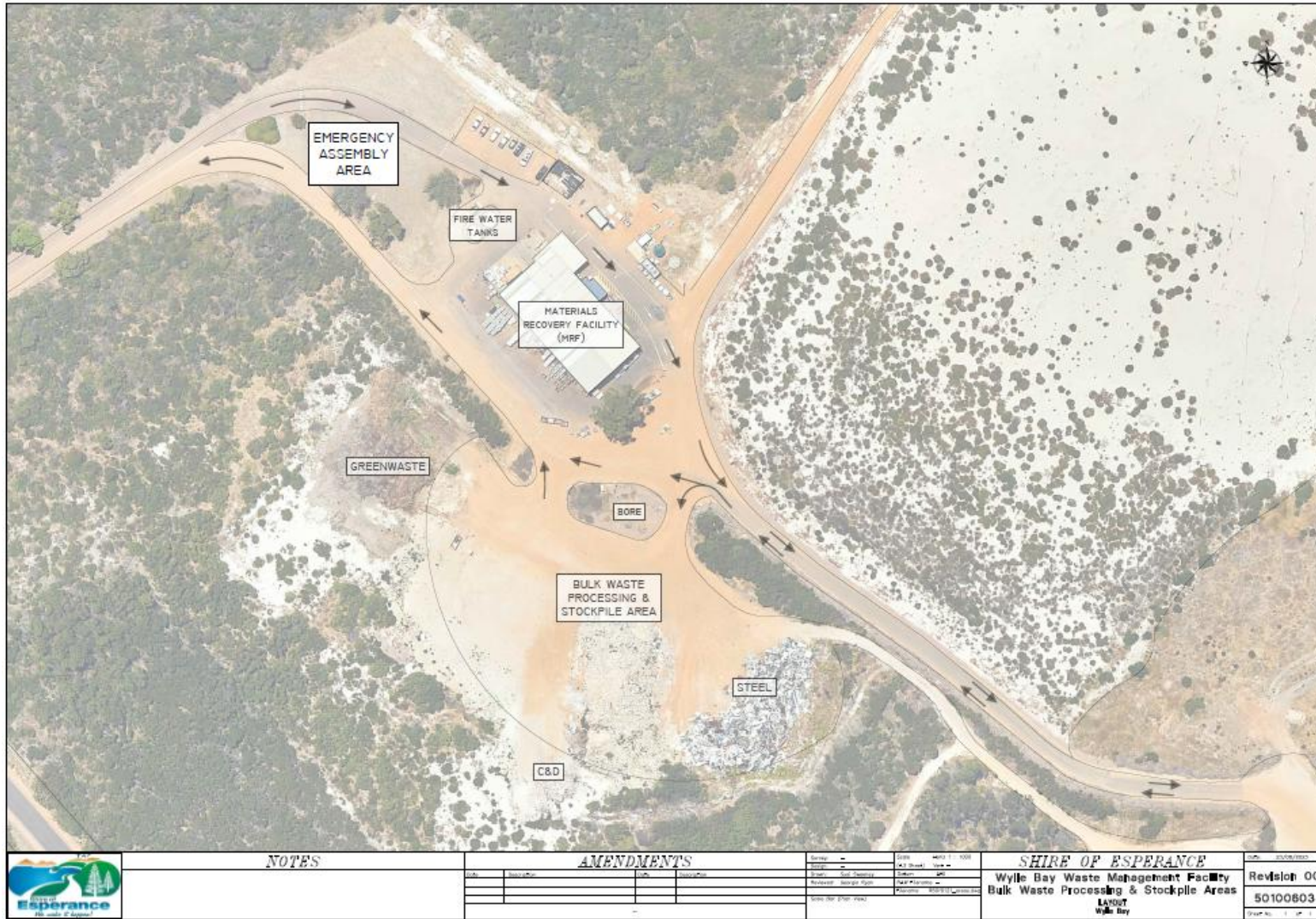


Figure 2: Site layout

Environmental Protection Act 1986

Licence number: L6882/1997/13 (Date of Amendment 9/03/2026)

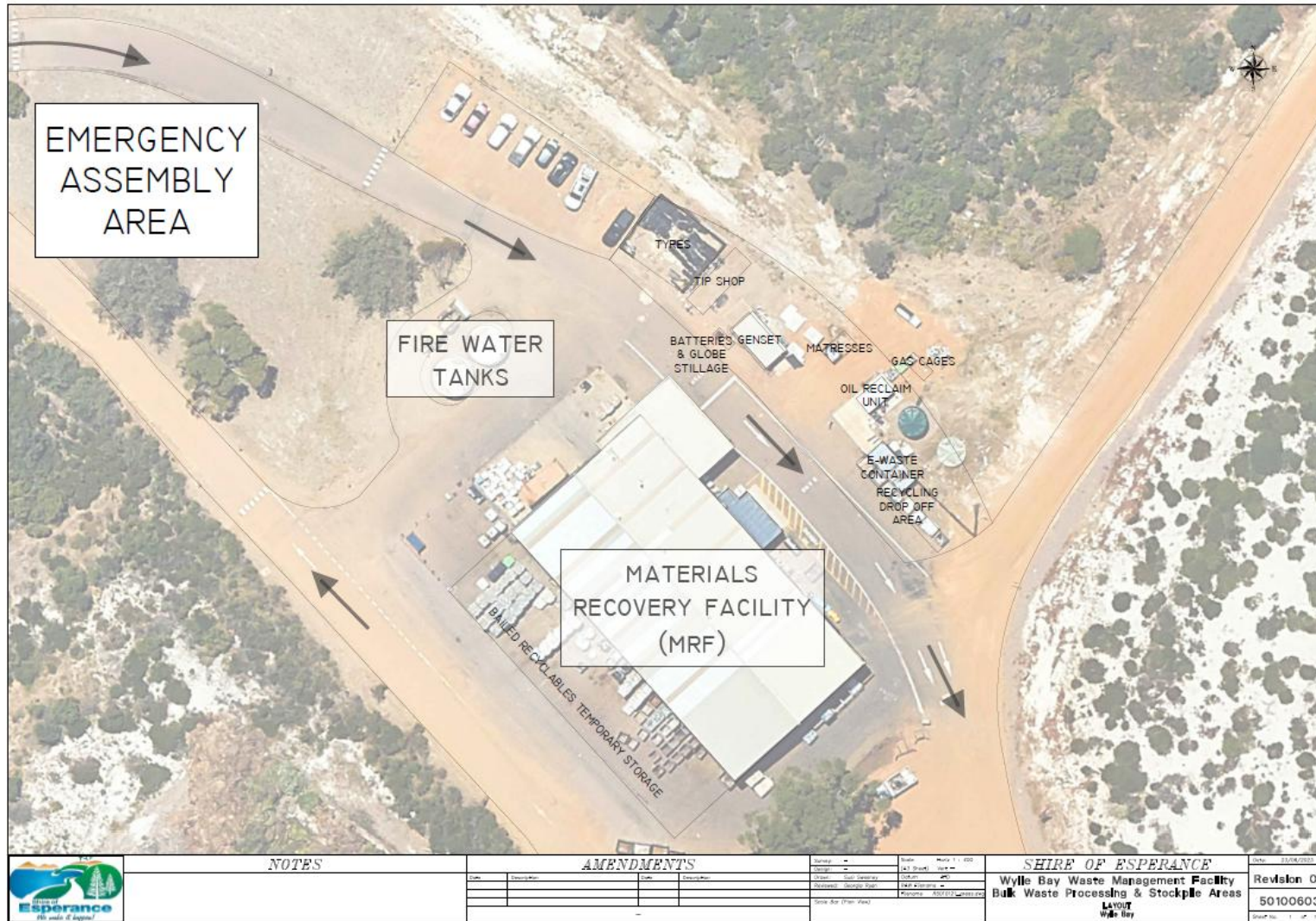


Figure 3: Recycling Areas

Environmental Protection Act 1986

Licence number: L6882/1997/13 (Date of Amendment 9/03/2026)



Figure 4: Bulk waste processing and stockpile areas layout

Environmental Protection Act 1986

Licence number: L6882/1997/13 (Date of Amendment 9/03/2026)

Monitoring Network Map

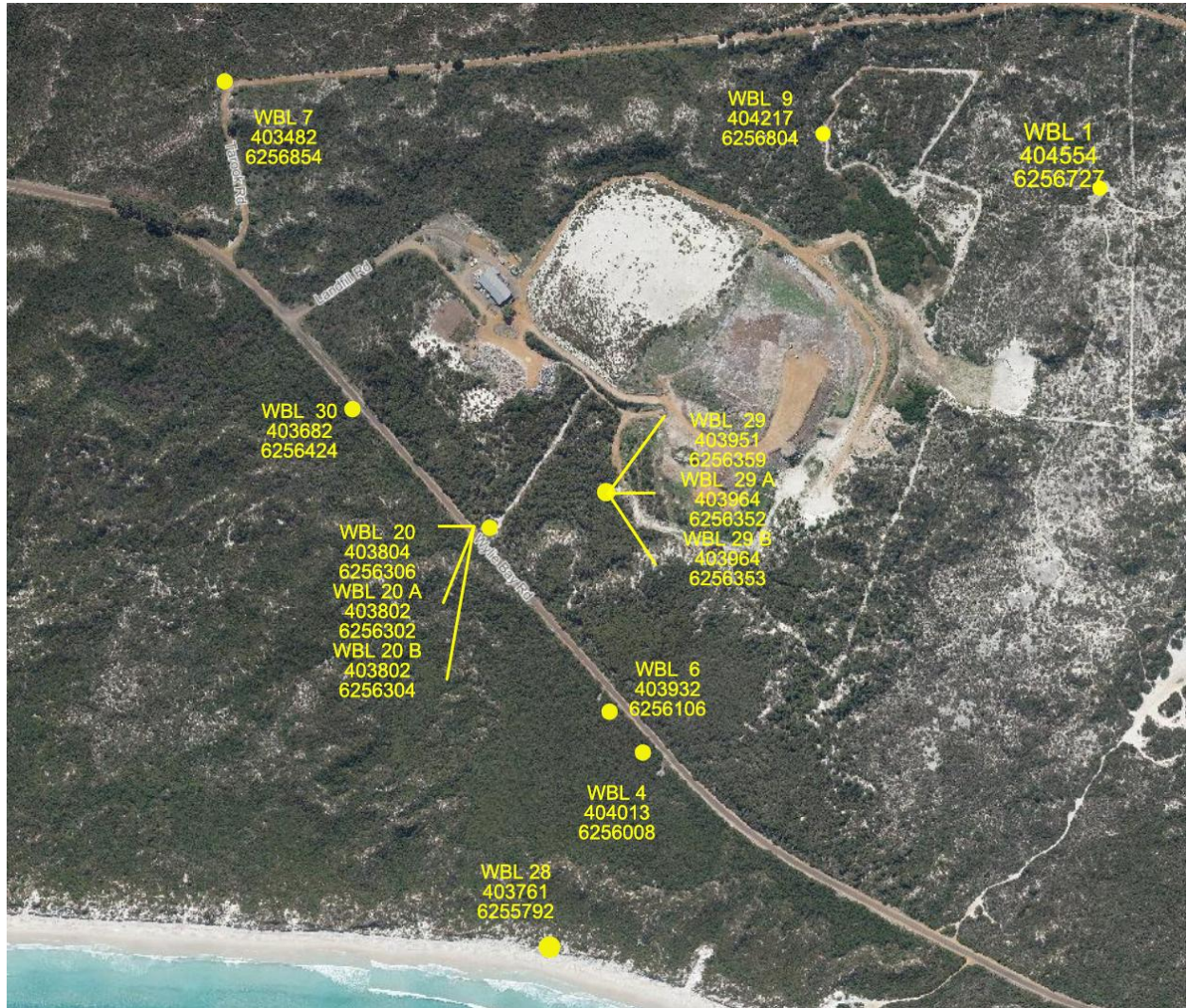


Figure 5: Current monitoring bore network map

Phased Filling Plan

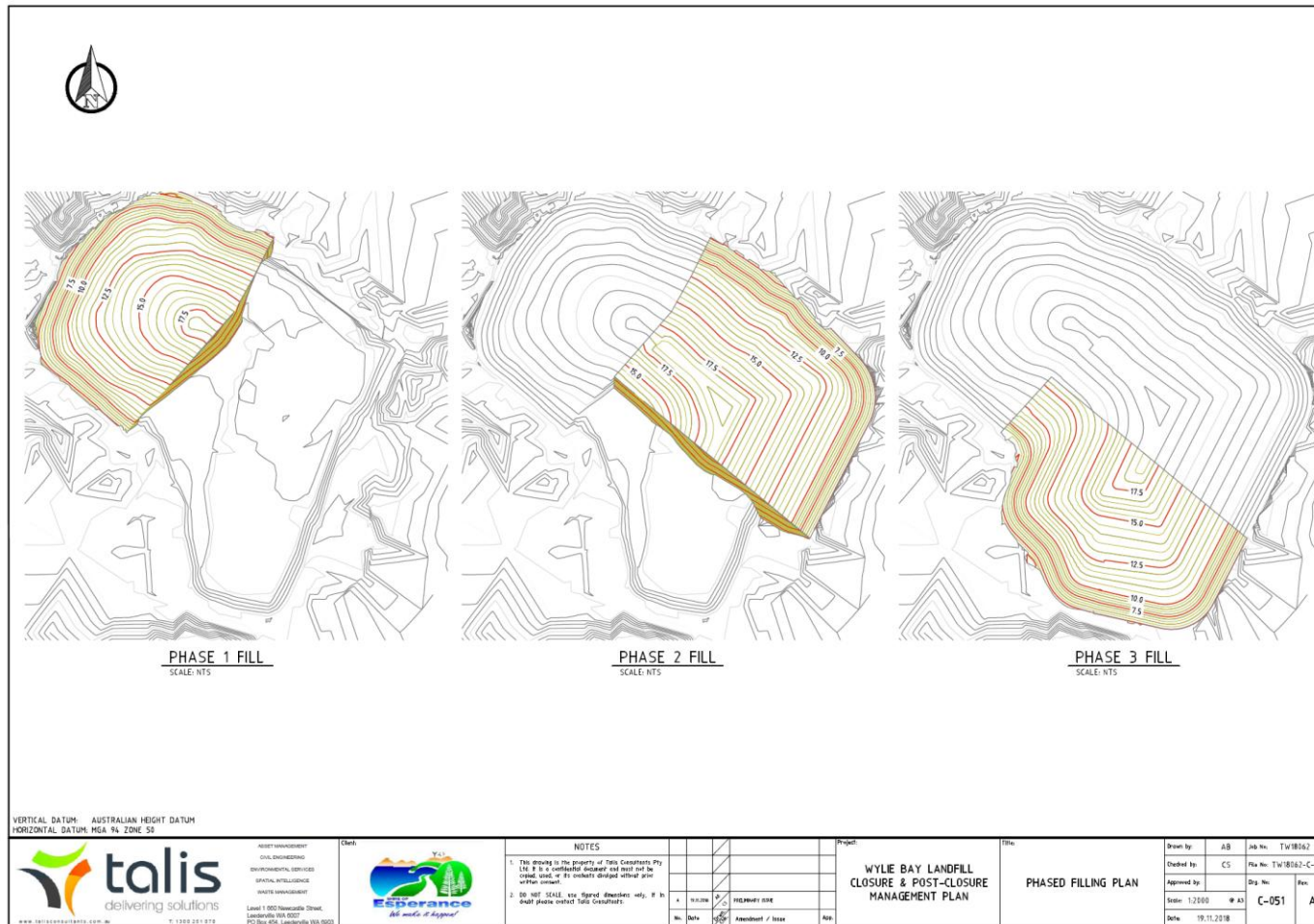


Figure 6: Phased Filling Plan

Environmental Protection Act 1986

Licence number: L6882/1997/13 (Date of Amendment 9/03/2026)

Schedule 2:

Asbestos risk classification procedure

To determine the risk of an incoming load containing asbestos or ACM, the gatehouse/ site entry operator at the premises must establish:

- the source of the load including the site location and if possible, the age of any building or structure from which the waste originated;
- the content / waste types within the load; and
- the type of load.

Where the source of the load can clearly be determined to be a building or structure constructed after 1990 then the load can be considered to represent a low risk of asbestos contamination.

Where the waste originates from a building constructed before 1990 or there is uncertainty over this issue, the risks associated with asbestos in the load must be established in line with the risk classification matrix in Table 9 below.

Table 9: Risk classification matrix

MATERIAL TYPE	TYPE OF LOAD		
	Commercial	Public – utes, cars, and trailers *	Skip bins
Clean concrete (without formwork)	Low	High	High
Clean brick	Low	High	High
Clean bitumen / asphalt	Low	High	High
Mixed construction waste	High	High	High
Mixed demolition waste	High	High	High

* If it is possible to view the entire load of incoming construction and demolition material (such as in the case of a small trailer with a shallow load), then consideration may be given to classifying those loads as 'low risk'.

(Source of information: *Guideline: Managing asbestos at construction and demolition waste recycling facilities*. Department of Water and Environmental Regulation, April 2021)

High risk load procedure

- 'High risk loads' must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides and components of the material to be undertaken.
- If asbestos fines and fibres (AF) or fibrous asbestos (FA) is suspected or identified, the load must be isolated, kept wet and once appropriately contained and redirected to an appropriately authorised disposal facility.
- Where ACM is suspected or identified within a load and is not capable of being easily removed by hand, the load must be rejected in full and isolated, kept wet and once appropriately contained and redirected to an appropriately authorised disposal facility.
- Where suspected ACM fragments capable of being easily removed by hand are identified in a load, the suspect ACM must be removed from the load and either:
 - (a) appropriately isolated and covered for asbestos testing. If testing of representative samples confirms the material is ACM it must be redirected to an appropriately authorised disposal facility. If testing confirms the material is not ACM the waste can be returned to the stockpile to await further processing; or
 - (b) assumed to be ACM and redirected to an appropriately authorised disposal facility.
- All suspected or assumed ACM must be segregated. Material must be clearly labelled, kept secure and sufficiently contained to prevent the release of asbestos including wind-blown fibres.
- Once all suspected or assumed ACM has been removed from a load in line with the above procedure, the residual waste can be added to the stockpile waiting further processing.
- Records must be kept to ensure that the process from receipt of construction and demolition material to the completion of the unloading procedure is auditable and that any loads found to contain suspect asbestos will be traced back to the customer and originating site.

(Source of information: *Guideline: Managing asbestos at construction and demolition waste recycling facilities*. Department of Water and Environmental Regulation, April 2021)

Product testing procedure

Product testing and supply

The testing procedures detailed in this Schedule have application to the three main recycled products:

1. Recycled drainage rock 20-27 mm;
2. Recycled sand, screened to <10 mm; and
3. Recycled road-base, <19mm.

ACM and FA are subject to visual inspection and sampling procedures since they are larger in size (>7 mm) and AF (<7 mm) is assessed by submitting samples for laboratory analysis.

Recycled products may be sampled from conveyors or stockpiles. Whichever approach is adopted, the operator will need to ensure that they have appropriate systems in place to allow them to identify where in the product stockpiles each sample is from to allow further testing or separation to occur if required.

Stockpile inspection and sampling

- In the case of recycled drainage rock and recycled road-base a visual inspection should be undertaken in a systematic grid fashion over any new stockpile material to identify any suspect asbestos material.
- No sampling is required for recycled drainage rock, other than to determine by laboratory analysis whether a suspect fragment is asbestos.
- For recycled road-base and screened sand, sampling is necessary and must be spread evenly over the whole stockpile surface or samples may be taken at regular intervals (as per conveyor sampling) during construction of the stockpile. Suspect ACM or areas must be targeted for sampling.
- Sampling of road base and screened sand products must occur at a minimum rate of 40 locations per 4000 tonnes or 14 samples per 1000 m³ of product.

Conveyor sampling

- Sampling of road base and screened sand products must occur at a minimum rate of 1 sample per 70 m³ of a product output. Suspect ACM or areas must be targeted for sampling.

Reduced sampling criteria

Once premises have demonstrated that their procedures are able to consistently produce recycled product that meets the product specification and undertake their activities to a high standard, DWER may authorise a reduced product testing rate including down to 5 locations per 4000 tonnes (1 sample per 600 m³) of product.

Sample treatment

- Each sample collected must be at least 10 litres in volume and then be divided into 2 size fractions (>7 mm and <7 mm) in the field by sieving through a 7 mm screen or spread out for inspection on a contrasting colour fabric. The >7 mm fraction should be examined for any suspect ACM and this be retained to calculate the level of contamination.
- The <7 mm fraction will need to be a minimum 500 mL, be wetted, and submitted for laboratory analysis. This sample size is considered necessary to improve the limit of

detection for asbestos in the analysis procedure.

Sample analysis method

- **>7 mm sample fractions –**
 - Asbestos concentrations (ACM and FA) should be calculated in accordance with the methods detailed in Appendix 2 of Department of Health (DoH), 2021, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia*. Averaging asbestos levels across the stockpile is not appropriate and asbestos levels within each sample should be reported.
- **<7 mm sample fractions**
 - Each <7 mm sample fraction must be analysed for fibrous FA and AF.
 - Asbestos analysis must be undertaken by an independent NATA certified laboratory and comply with *Australian Standard Method for the Qualitative Identification of asbestos in bulk samples (AS 4964)* or be demonstrated to be able to achieve the equivalent level of results to this Australian Standard.

AS 4964 is currently the only method in Australia that has NATA certification; however, the practicable level of detection for this standard polarized light microscopy method (PLM) and dispersion staining is 0.01% w/w. It is possible however, to measure asbestos contamination at or lower than 0.001% w/w where an increased sample size is used, however DWER recognises that any reporting of concentrations below 0.01% w/w will be outside the conditions set by NATA.

Therefore, to determine whether recycled products meet the product specifications for asbestos content, samples must be a minimum of 500 mL in size. Proponents must adopt one of the following analytical approaches:

1. Detected/non-detected – where any quantity of asbestos is detected by the PLM method it must be assumed, without further analysis, to be in concentrations above the product specification limit of 0.001% w/w. A weight of evidence approach may be adopted i.e. the frequency and occurrence of other positive results in the stockpile can be taken into account to determine whether the stockpile being assessed is considered to meet the product specification or not; or
2. Where any quantity of asbestos is detected by the PLM method, the sample is subject to further testing in the form of a semi-quantitative method with a lower level of detection for asbestos. Either of the following methods are considered acceptable by DWER:
 - The extraction and weighing of fibre bundles or fibre cement material from the total sample; and
 - Measuring the width and length (i.e. volume) of individual fibre by Phase Contrast Microscopy and calculating the weight of fibres in the extracted sub-sample.

Interpreting inspection and sampling results

- If the visual inspection, sieve sample or analytical results identify asbestos above or possibly above the 0.001% w/w criterion, then that stockpile or product process should be deemed potentially contaminated and considered for off-site disposal as Special Waste Type 1, or subject to further actions to remediate it or to demonstrate its acceptability by further assessment. A record should be made of the decision-making and action taken (e.g., off-site disposal, further assessment undertaken etc.) in relation

to that stockpile.

- In addition to the above, where asbestos is identified above or possibly above the 0.001% w/w criterion, an investigation into the likely cause for the presence of asbestos in the product should be undertaken and measures implemented to prevent a reoccurrence. A record of the investigation and its findings together with the details of any preventative measures implemented at the site should be made.
- As a guide, in the case of recycled drainage rock identification of a piece of ACM or FA per 10 m² of surface would be deemed to exceed the specification for that area, and for the whole stockpile if repeated in 2 or more other separate areas. A single fragment exceedance can be considered an isolated occurrence in the absence of other contamination evidence and the stockpile allowed for beneficial use. If there is multiple contamination only of a localised area then that area can be excavated to the extent of any visible asbestos and then the remainder of the stockpile considered to be suitable for use.
- For laboratory analysis it is important that each result be considered on its own merits in regard to the asbestos control specification and that there is no averaging across samples. In the case of a single exceedance at a level less than 0.01% w/w, the stockpile (nominally 4000 tonnes) may not be deemed contaminated if repeat samples of immediately adjacent areas do not demonstrate specification exceedances.
- The same approach as indicated in the preceding paragraph can be applied to the results of the >7 mm sieve sampling in regard to the recycled sand material and roadbase. In this case a 1 cm³ fragment of ACM or FA would be deemed to exceed the specification for a 10 L sample.
- It should be noted that specification exceedances in regard to different assessment methods for the same type of stockpile should not be viewed in isolation from each other.

(Source of information: *Guideline: Managing asbestos at construction and demolition waste recycling facilities*. Department of Water and Environmental Regulation, April 2021)