Licence

Licence Number	L8417/2010/2
Licence Holder	West Tip Waste Control Pty Ltd
ACN	088 277 123
Registered business address	311-313 Hay Street SUBIACO WA 6008
File Number	INS-0001665
Duration	29/11/2013 to 28/11/2033
Date of amendment	06/10/2025
Premises details	Redoak Corporation and West Bins 394 Victoria Road, Malaga WA 6090 Legal description - Lot 73 on Diagram 97213 and Part of Lot 72 on Diagram 97213 Certificate of Title Volume 2161 Folio 619; and Strata Lot 1 on Strata Plan 40768 Certificate of Title Volume 2509 Folio 1 As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, ***Environmental Protection Regulations 1987***)	**Assessed production capacity**
Category 62: solid waste depot	150,000 tonnes per annum

This Licence is granted to the Licence Holder, subject to the following conditions, on 06 October 2025, by:

Steve Checker

Digitally signed by Steve Checker
Date: 2025.10.06 08:21:31 +08'00'

Steve Checker
MANAGER WASTE INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986*

Licence history

Date	Reference number	Summary of changes
29/11/2010	L8417/2010/1	Licence granted.
29/11/2013	L8417/2010/2	Licence renewal.
25/08/2017	L8417/2010/2	Amended to alter the Premises boundary, expand the waste sorting area, including storage and sorting of waste, and include an asbestos management plan and dust monitoring and management program.
6/10/2025	L8417/2010/2	Licence amendment to incorporate the following changes: • Increase in licensed throughput from 80,000 tonnes p/a to 150,000 tonnes p/a for construction and demolition (inert) waste type. • Amended conversion factor to calculate tonnage. • Amended annual period and associated reporting period obligations to align with financial year. • Amended timeframe for removal of putrescible waste. • Removal of redundant dust monitoring and asbestos signage conditions.

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:

Throughput restrictions

1. The Licence Holder must not accept more than 150,000 tonnes of Waste in total per Annual Period.

2. The Licence Holder must not accept more than 8,000 tonnes of Putrescible Waste per Annual Period.

3. The Licence Holder must not accept more than 500 tonnes of Special Waste Type 1 (Asbestos) per Annual Period.

4. The Licence Holder must monitor and record the volumes of incoming and outgoing Waste and outgoing Products at the Premises for the parameters stipulated in Column 1 of Table 1 using the units specified in Column 2 of Table 1 at the frequency specified in Column 3 of Table 1.

Table 1: Monitoring of inputs and outputs

Parameter	Units	Frequency
Waste inputs: Clean Fill Inert Waste Type 1 Inert Waste Type 2	Tonnes – as measured by certified load scales on wheel loaders. OR m^3 and calculated tonnes[1]	Each load arriving at the Premises.
Putrescible Waste (green-waste, paper and cardboard only)		Each load arriving at the Premises.
Special Waste Type 1 (Asbestos)		Each load arriving at the Premises.
Waste outputs: Waste type as defined in the Landfill Definitions		Each load leaving or rejected from the Premises.
Product outputs: Product type		Each load leaving the Premises.

Note 1: Conversion from m^3 to tonnes in accordance with *Approved procedure for estimation/calculation of annual return information methods by recycling and reprocessing facilities required under the Waste Avoidance and Resource Recovery Regulations 2008* (June 2019)

Waste type restrictions and waste classification

Mixed Waste Loads

5. The Licence Holder must only accept mixed waste loads consisting of the following types of Waste onto the Premises for storage and sorting and screening.

(a) Clean Fill;

(b) Inert Waste Type 1;

(c) Inert Waste Type 2; and

(d) Putrescible Waste (green-waste, cardboard and paper only).

6. Mixed Waste loads must not be accepted onto the Premises when:

(a) the load contains visible Asbestos or ACM, inspected and classified in accordance with Condition 7; or

(b) the Licence Holder has not obtained a signed declaration from the supplier of the source material with each delivery that:

(i) sets out the details of the Waste source, carrier, registration number of the vehicle and the date of delivery;

(ii) sets out the Waste type and volume being delivered; and

(iii) warrants that the load does not contain any Asbestos or ACM.

7. The Licence Holder must visually inspect all loads of Waste when they arrive at the Premises, prior to unloading, to determine the risk of a load containing Asbestos or ACM and each load shall be classified in accordance with Schedule 3: Asbestos load risk classification procedure.

8. Where the visual inspection identifies that Waste is not permitted by the Licence, the Licence Holder must:

(a) reject the Waste for acceptance;

(b) record the details of the Waste source, waste carrier, registration number of the vehicle and the date of rejection; and

(c) maintain accurate and auditable records of all rejected loads on the Premises.

Dedicated Loads

9. The Licence Holder must only accept Special Waste Type 1 (Asbestos) as a Dedicated Load onto the Premises for storage and consolidation and only if the load is appropriately wrapped and labelled ‘Caution Asbestos’.

10. The Licence Holder must maintain a clearly visible sign specifying “Asbestos is only accepted at the facility in a Dedicated Load and appropriately wrapped”.

11. The Licence Holder must store all Dedicated Loads (Asbestos) within a secure area that is clearly marked and delineated.

Waste processing restrictions

12. Subject to the Waste Type restrictions in Condition 5, the Licence Holder must ensure that all Wastes specified in Column 1 of Table 2 are only subject to the processes stipulated in Column 2 of Table 2 and in accordance with any process limits specified in Column 3 of Table 2.

Table 2: Waste processing restrictions

Waste Type	Processes	Process limits
Solid Waste: Clean Fill Inert Waste Type 1 Inert Waste Type 2	Receipt, handling, associated storage and processing by mechanical sorting (screening).	Subject to compliance with: • Throughput restrictions and Waste type and waste classification requirements as specified in Conditions 1 to 8. • Waste acceptance and load inspection requirements as specified in Conditions 13 to 18. • Stockpile management requirements as specified in Conditions 20 to 21. • Dust Emission controls as specified in Conditions 22 to 23. • Product testing and supply requirements as specified in Conditions 25 to 27.
Putrescible Waste	Receipt, handling and storage prior to removal off-site to an appropriate facility for disposal.	Subject to compliance with Conditions 1 to 5, Condition 19 and Condition 22.
Special Waste Type 1 (Asbestos)	Receipt, handling and storage prior to removal off-site to an appropriate facility for disposal.	Subject to compliance with Conditions 9 to 11.

Waste acceptance and load inspection

13. Upon acceptance of Waste, the Licence Holder must direct each Classified Load to an unloading area within the Waste receival shed for further inspection. The unloading area must be appropriately designed and constructed to ensure the Classified Load will not mix with other Waste prior to inspection.

At the unloading area, the Licence Holder must keep all Waste damp throughout the inspection process using the infrastructure specified in Row 4 of

14. Table 3 set out in Condition 22. The Licence Holder must visually inspect loads classified as Low Risk Loads, while the material is being unloaded to determine whether any Asbestos can be identified.

15. If Asbestos is suspected or identified, the load must be reclassified as a High-Risk Load and the Licence Holder must implement the High-Risk Load procedure set out in Schedule 4: High risk load procedure.

16. High Risk Loads must be visually inspected and handled in accordance with Schedule 4: High risk load procedure.

17. The Licence Holder must maintain accurate and auditable records of all loads that have been inspected and suspected or found to contain Asbestos. Those records must show the source and originating site and actions taken to address the issue with the source customer.

18. The Licence Holder must visually inspect Waste on the Premises at all stages of the storage, sorting and screening process. Suspected Asbestos identified at any stage of the process must be handled in accordance with the procedure set out in Schedule 3: Asbestos load risk classification procedure and records maintained in accordance with Condition 17.

19. The Licence Holder must ensure that putrescible wastes are removed from site within 14 days of acceptance.

Stockpile / bunker management

20. The Licence Holder must ensure that:

(a) material on the Premises is maintained in at least three separate stockpile areas for unprocessed Waste, Products awaiting testing for Asbestos or ACM and Products tested for Asbestos or ACM; and

(b) unprocessed Waste and Product stockpiles are kept clearly separated at a minimum three metre distance from the stockpile base;

(c) Products tested for Asbestos or ACM and Products awaiting testing for Asbestos or ACM are clearly separated by a minimum three metre distance from the stockpile base;

(d) Clearly visible and legible signage is erected on individual stockpiles to clearly identify and delineate unprocessed Waste, untested Product and tested Products; and

(e) Where Asbestos is identified through product testing, the Licence Holder must follow the procedure set out in Schedule 3: Asbestos load risk classification procedure.

21. The Licence Holder must ensure that the heights of all outdoor Waste and Product stockpiles do not exceed 3m in height.

Infrastructure and equipment

22. The Licence Holder must ensure that the infrastructure and equipment specified in Column 1 of Table 3 is maintained in good working order and operated in accordance with the requirements specified in Column 2 of Table 3.

Table 3: Infrastructure and equipment controls table

	Site infrastructure and equipment	Operational requirements	Infrastructure location
	Dust and Asbestos controls		
1.	Covers / fencing	The existing solid sheet steel fencing must be maintained along the Premises boundary to aid in reducing dust impacts to neighbouring properties.	Along the premises boundary as shown in Schedule 1: Maps, Figure 2
2.	Waste receival and sorting shed	a) All waste arriving at the Premises must be unloaded within the waste receival shed for initial inspection and to prevent plumes of dust on its deposit. b) Roller doors (at entrance and exit of loadout bay) must be kept closed when waste receival, sorting and processing activities are taking place within the shed, except when vehicles are entering/leaving the shed.	As labelled in Schedule 1: Maps, Figure 2
3.	Waste processing shed	a) The waste processing shed must enclose all dust producing operations – including all waste processing and storage activities. b) The shed must be sealed during sorting and processing of waste to prevent dust escaping. c) Vehicle access opening to the shed must minimise dust emissions by: i) keeping the size as small as possible. ii) maintain cladding extending at least 2 metres downward from the roof. iii) operating sprinklers so that a “misting curtain” forms that prevents dust from leaving the shed.	As labelled in Schedule 1: Maps, Figure 2

	Site infrastructure and equipment	Operational requirements	Infrastructure location
4.	Sprinklers running along all or on top of conveyors, screens, stockpiles, vibrating screens, and density separators. Ceiling sprinklers within the waste receival shed and exit loadout bay.	a) Series of sprinklers that are attached to, or on top of, all Product and Waste conveyors, screens, stockpiles, vibrating screens and density separators and within the existing shed and in the loadout bay that are capable of wetting down the entire surface of all Waste and Product evenly to maintain the Waste and Product in a Damp state. b) Sprays need to effectively wet the surface and suppress airborne dust particles. The positioning and setup of sprays must effectively deliver water sprays. c) Sprinklers are to be maintained in good working order to ensure availability during operation of equipment. Sprays must be operational at all times when equipment is operating.	Located internally within the waste receival and waste processing sheds as shown in Schedule 1: Maps, Figure 2
5.	Water cart with a capacity of 12,000L with sprays and cannon	Roadways and all Product and Waste stockpiles must remain in a damp state at all times to prevent dust lift off. Targeted wetting must occur when material handling such as reclaiming from the stockpiles has the potential to generate fugitive dust.	Located within the prescribed premises boundary as indicated in Schedule 1: Figure 1
	Noise Controls		
6.	Fencing	The combination of solid sheet steel fencing and concrete 4m high barriers between West Tip Waste Control Pty Ltd and immediately adjacent to the south and east of the Premises.	Labelled as ‘4m high Colourbond screen fence’ as shown in Schedule 1: Maps, Figure 2
7.	Barriers	a) All screeners and conveyors must have barriers constructed with a combination of concrete and anticon to limit noise emissions. b) Barriers are to be maintained in good working order to ensure availability during operation of equipment.	Located on all screeners and conveyors

	Site infrastructure and equipment	Operational requirements	Infrastructure location
	Leachate and sediment controls		
8.	Putrescible waste bins	All putrescible wastes must be stored in sealed bins that are undercover or covered with tarpaulin to prevent rainfall ingress.	Located within the prescribed premises boundary as indicated in Schedule 1: Figure 1
9.	Leachate containment	a) All potentially contaminated storm water and leachate within the waste receival shed must be contained on site and discharged to sewer via a solids arrestor. b) The leachate containment must be designed to contain all storm water runoff from sealed areas prior to sewer.	Location not specified
10.	Sediment traps at storm water drains	All storm water drains must have a sediment retention facility to prevent sediment from leaving the Premises.	Located on all stormwater drains

Emissions and discharges

Dust emission controls

23. The Licence Holder must ensure that all vehicles operate at speeds of less than 15km/hr through the Premises.

Noise emission controls

24. The Licence Holder must ensure that the Premises only operate between the hours of 07:00 to 17:00 Monday to Friday and 07:00 to 13:00 on Saturdays.

Monitoring

Product testing and supply

25. The Licence Holder must ensure that testing of all Products is undertaken in accordance with the Product testing procedures specified in Schedule 5: Asbestos monitoring and testing.

26. The Licence Holder must ensure that Products are only supplied to customers where they have been tested in accordance with Condition 25 and shown to conform with the product specification of 0.001% Asbestos weight for weight (w/w) for Asbestos content (in any form) within any recycled Products.

27. The Licence Holder must maintain accurate and auditable records of all Asbestos Product testing undertaken in accordance with Condition 25. These records must include:

(a) details of sample size;

(b) a statement of limit of detection of the analysis;

(c) results in relation to Asbestos detected (positive result exceeding the 0.001% w/w limit) or not;

(d) description of any Asbestos detected; and

(e) an estimate of the concentration of Asbestos detected if practical to do so.

Record-keeping

28. The Licence Holder must maintain accurate and auditable Books including the following records, information, reports and data required by this Licence:

(a) the calculation of fees payable in respect of this Licence;

(b) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Condition 22 of this Licence;

(c) asbestos monitoring under Conditions 25 and 27 of this Licence;

(d) complaints received under Condition 29 of this Licence; and

In addition, the Books must:

(e) be legible;

(f) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;

(g) be retained for at least seven years from the date the Books were made; and

(h) be available to be produced to an Inspector or the CEO.

29. The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to its obligations under this Licence and its compliance with Part V of the EP Act at the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:

(a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;

(b) the name and contact details of the complainant, if provided by the complainant;

(c) the date of the complaint; and

(d) the details and dates of the actions taken by the Licence Holder in response to the complaints.

Reporting

30. 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 for that period in the approved form by 31 July each year.

31. The Licence Holder must:

(a) prepare an Environmental Report that provides information in accordance with the requirements set out in

(b) Table 4 for the preceding annual period; and

(c) submit that environmental report to the CEO by no later than 31 July each year.

Table 4: Environmental reporting requirements

Condition	Requirement
N/A	A summary of any failure or malfunction of any pollution control equipment or any incidents that occurred during the annual period and any related action taken.
4 and 8	A summary of any rejected loads during the annual period.
17	A summary of any loads that were inspected and suspected or found to contain asbestos or ACM.
4	A summary of waste input monitoring
4	A summary of output monitoring
25	A summary of recycled material monitoring results, including the following information: i) the total number of samples collected; ii) the number of samples that conformed to the recycled material specification; iii) the number of samples that did not conform to the recycled material specification; iv) the outcome of any investigations or actions taken to address any processed waste stockpiles that did not conform to the recycled material specification; and v) field sampling records and laboratory certificates for any samples that did not conform to the recycled material specification.
29	A summary of complaints, including the information required to be recorded by the condition.

Definitions

In this Licence, the terms in Table 5 have the meanings defined.

Table 5: Definitions

Term	Definition
ACM	means Asbestos containing material and has the meaning defined in the *Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia* (DOH, 2009)
ACN	Australian Company Number
Annual Period	means a 12-month period commencing from 1 July to 30 June the following year.
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Classified Load	means the classification of waste loads during acceptance and post acceptance based on the risk of waste material containing Asbestos or ACM and through visual inspection.
Clean Fill	has the meaning defined in the Landfill Definitions
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Damp	means moist to the touch.
Dedicated Load	asbestos wrapped material for consolidation.
Department	means the department established under s.35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER Asbestos Guidelines	means the document titled “Guideline: Managing asbestos at construction and demolition waste recycling facilities”, published by the Department of Water and Environmental Regulation, as amended from time to time.

Term	Definition
Discharge	has the same meaning given to that term under the EP Act.
Emission	has the same meaning given to that term under the EP Act.
EP Act	means the *Environmental Protection Act 1986* (WA).
EP Regulations	means the *Environmental Protection Regulations 1987* (WA).
FA	means fibrous asbestos and has the meaning defined in the *Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia* published by the Department of Health.
High Risk Loads	refers to loads classified as "high risk" in accordance with the DWER Asbestos Guidelines section 3.3 '*Risk Classification Matrix'.*
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.
Inert Waste Type 2	has the meaning defined in the Landfill Definitions.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Landfill Definitions	means the document titled 'Landfill Waste Classification and Waste Definitions 1996' published by the CEO as amended from time to time.
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Low Risk Loads	refers to loads classified as "low risk" in the DWER Asbestos Guidelines, section 3.3 '*Risk Classification Matrix'.*
Mixed Waste Loads	Construction and Demolition Waste accepted to the Premises including Clean Fill, Inert Waste Type 1, Inert Waste Type 2 and Putrescible Waste.
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.

Term	Definition
Products	refers to Wastes which have undergone processing or screening to create a useable recycled product and which has been tested and conforms with the specifications of this Licence.
Sediment	means any naturally occurring material (e.g. sand, mud, soil, silt) or processed waste-derived material that has the potential to be transported by the action of wind, water or through vehicular movement.
Special Waste Type 1	has the meaning defined in the Landfill Definitions.
Sprays	water droplet clouds emitted from the sprinklers
Sprinklers	infrastructure that delivers water in the form of water droplets
Stockpile Base	refers to the toe of a stockpile, being the furthest point at the base of the stockpile that the material extends to.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Waste	has the same meaning given to that term under the EP Act.

Schedule 1: Maps

Premises map

The Premises are shown in the map below (Figure 1).

Figure 1: Premises map

Site map: Waste processing shed

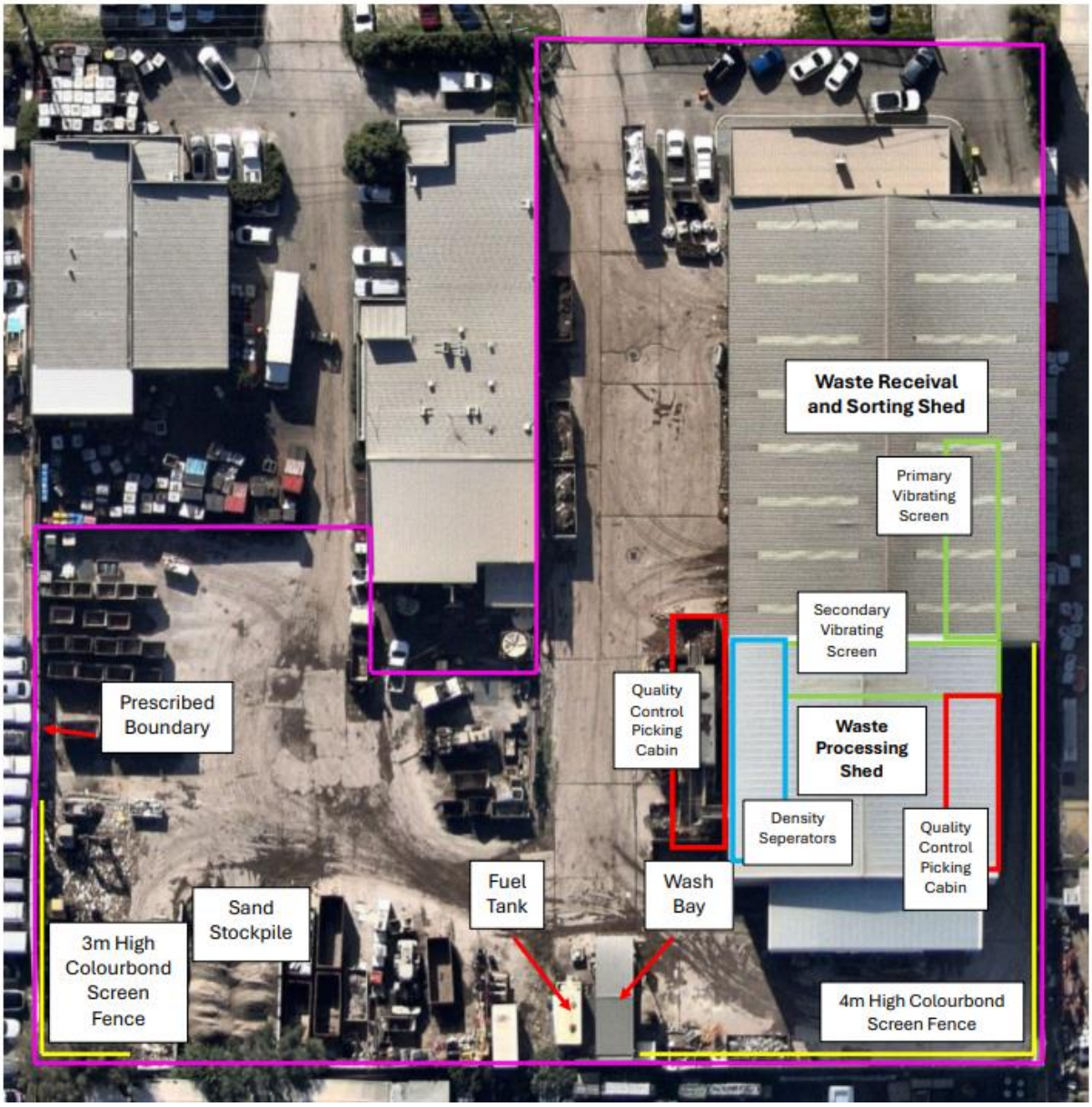

Figure 2: Site map

Schedule 2: Premises boundary

The Premises boundary is defined by the coordinates in Table 6.

Table 6: Premises boundary coordinates

Easting	Northing
395902	6474371
395903	6474269
395803	6474267
395802	6474322
395835	6474307
395835	6474322
395852	6474370

Schedule 3: Asbestos load risk classification procedure

To determine the risk of an incoming load containing asbestos or ACM, the gatehouse 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 7. below.

Table 7: Risk classification matrix

	TYPE OF LOAD		
MATERIAL TYPE	**Commercial**	**Public – utes, cars, and trailers [1]**	**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

Note 1: 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'.

Schedule 4: 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 (AF) or fibrous asbestos (FA) is suspected or identified, the load must be isolated, kept wet and, once appropriately contained, redirected to an appropriately authorised 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, redirected to an appropriately authorised 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:
    1. 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 facility. If testing confirms the material is not ACM the waste can be returned to the stockpile to await further processing; or
    2. assumed to be ACM and redirected to an appropriately authorised facility.
- All suspected or assumed ACM must be segregated and stored in the quarantined storage area or container. 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 material can be added to the stockpile waiting further processing.
- Records must be kept to ensure that the process from receipt of all waste types 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.

Schedule 5: Asbestos monitoring and testing

Recycled material testing and supply

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

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 materials 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 recycled material 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 recycled materials must occur at a minimum rate of 40 locations per 4000 tonnes or 14 samples per 1000 m^3 of recycled material.

Conveyor sampling

- Sampling of road base and screened sand recycled materials must occur at a minimum rate of 1 sample per 70 m^3 of a recycled material 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 material that meets the recycled material specification and undertake their activities to a high standard, DWER may authorise a reduced recycled material testing rate including down to 5 locations per 4000 tonnes (1 sample per 600 m^3) of recycled material.

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 the *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 materials meet the recycled material 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 recycled material 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 recycled material 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 recycled material 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 recycled material 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 m^2 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 cm^3 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.