Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence Number	L7038/1997/12
Licence Holder	Brajkovich Landfill & Recycling Pty Ltd
ACN	161 973 931
Registered business address	OSBORNE PARK WA 6017
File Number	DER2015/001610
Duration	16/06/2011 to 30/09/2021
Date of issue	26 September 2019
Prescribed Premises	Category 12: Crushing of building material Category 62: Solid waste depot Category 63: Class 1 inert landfill Category 70: Screening, etc. of material
Premises	Quinns Quarry 220 Hester Avenue NEERABUP WA 6031 Part of Lot 11533 on Plan 217813 As defined by the coordinates in Schedule 1

This Licence is granted to the Licence Holder, subject to the following conditions, on 26 September 2019, by:

Tracey Hassell
Digitally signed by Tracey Hassell
Date: 2019.09.26 12:37:05 +08'00'

Tracey Hassell
A/MANAGER WASTE LICENSING
REGULATORY SERVICES

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

Explanatory notes

These explanatory notes do not form part of this Licence.

Defined terms

Definition of terms used in this Licence can be found at the start of this Licence. Terms which are defined have the first letter of each word capitalised throughout this Licence.

Department of Water and Environmental Regulation

The Department of Water and Environmental Regulation (DWER) is established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the *Environmental Protection Act 1986* (WA) (EP Act). The Department also monitors and audits compliance with licences, takes enforcement action and develops and implements licensing and industry regulation policy.

Licence

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased, or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered, or permitted to be altered, from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA) (EP Regulations).

This Licence does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the *Waste Avoidance and Resource Recovery Act 2007;*
- any requirements under the *Environmental Protection (Controlled Waste) Regulations 2004*; and
- any other requirements specified through State legislation.

It is the responsibility of the Licence Holder to ensure that any action or activity referred to in this Licence is permitted by, and is carried out in compliance with, other statutory requirements.

The Licence Holder must comply with the Licence. Contravening a Licence Condition is an offence under s.58 of the EP Act.

Responsibilities of a Licence Holder

Separate to the requirements of this Licence, general obligations of Licence Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Licence Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under section 61; and
- restrictions on making certain changes to Prescribed Premises unless the changes are in accordance with a works approval, Licence, closure notice or environmental protection notice (s.53).

Strict penalties apply for offences under the EP Act.

Reporting of incidents

The Licence Holder has a duty to report to DWER all discharges of waste that have caused or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

Offences and defences

The EP Act and its regulations set out a number of offences, including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA).*
- Offences relating to noise under the *Environmental Protection (Noise) Regulations 1997 (WA).*

Section 53 of the EP Act provides that a Licence Holder commits an offence if Emissions are caused, or altered from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a Closure Notice or an Environmental Protection Notice.

Defences to certain offences may be available to a Licence Holder and these are set out in the EP Act. Section 74A(b)(iv) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Licence Holder can prove that an Emission or Discharge occurred in accordance with a Licence.

This Licence specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of Specified Emissions and Discharges, in order for the defence to offence provision to be available.

Authorised Emissions and Discharges

The Specified and General Emissions and Discharges from Primary Activities conducted on the Prescribed Premises are authorised to be conducted in accordance with the Conditions of this Licence.

Emissions and Discharges caused from other activities not related to the Primary Activities at the Premises have not been Conditioned in this Licence. Emissions and Discharges from other activities at the Premises are subject to the general provisions of the EP Act.

Amendment of licence

The Licence Holder can apply to amend the Conditions of this Licence under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Licence at any time on the initiative of the CEO without an application being made.

Amendment Notices constitute written notice of the amendment in accordance with s.59B(9) of the EP Act.

Duration of Licence

The Licence will remain in force for the duration set out on the first page of this Licence or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

Suspension or revocation

The CEO may suspend or revoke this Licence in accordance with s.59A of the EP Act.

Fees

The Licence Holder must pay an annual licence fee. Late payment of annual licence fees may result in the licence ceasing to have effect.

Definitions and interpretation

Definitions

In this Licence, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
ACM	means Asbestos Containing Material
ACN	Australian Company Number
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act.
Anniversary Date	means 1 July of each year.
Annual Period	means a 12 month period commencing from 1 July until 30 June in the following 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, chrysotile, crocidolite, tremolite and any mixture containing 2 or more of those.
Asbestos Containing Material	has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009)
Asbestos Fibres	has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009)
Asbestos Guidelines	means document titled “Guidelines for managing asbestos at construction and demolition waste recycling facilities”, published by the Department, as amended from time to time.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*
Asphalt Waste	has the meaning defined in Landfill Definitions.
Attachment 1	means Attachment 1 of this Licence unless otherwise stated.
Attachment 2	means Attachment 2 of this Licence unless otherwise stated.
Attachment 3	means Attachment 3 of this Licence unless otherwise stated.

Term	Definition
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 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. Classification of waste loads shall be undertaken in accordance with the provisions outlined in Section 3.3 and 3.4 Asbestos Guidelines.
Clean Fill	has the meaning defined in Landfill Definitions.
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Construction and Demolition Waste	has the meaning defined in Landfill Definitions.
Damp	means wet enough that dust cannot be visibly generated
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: (a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or (c) the Books or other sources of information relating to Emissions from the Premises.

Term	Definition
Drilling Slurry	means the solid and liquids abstracted from underground drilling works, meeting the criteria for Class I landfills, as specified in the Landfill Definitions.
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	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).
Green Waste	means solid waste that originated from flora and which does not contain or has not been treated or coated with preserving agents, biocides, fire retardants, paint, adhesives or binders.
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inert Waste Type 1	Has the meaning defined in Landfill Definitions
Inert Waste Type 2	Has the meaning defined in Landfill Definitions
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Landfill Definitions	*Landfill Waste Classification and Waste Definitions 1996 (as amended 2018)*
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.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
Metal Dust	means the fine and small particles of waste concrete generated during concrete crushing operations, meeting the criteria for Class I landfills, as specified in the Landfill Definitions
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

Term	Definition
Noise Regulations	means the *Environmental Protection (Noise) Regulations 1997*
Normal Operating Conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring
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.
Primary Activities	refers to the Prescribed Premises activities listed on the front of this Licence as described in Schedule 2, at the locations shown in Schedule 1.
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.
Quarterly	means the 4 inclusive periods from 1 October to 31 December and in the following year, 1 January to 31 March, 1 April to 30 June and 1 July to 30 September
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Shut-down	means the period when plant or equipment is brought from normal operating conditions to inactivity
Special Waste Type 1	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.
Start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions
tpa	means tonnes per annual period

Term	Definition
Unreasonable Emission	has the same meaning given to that term under the EP Act.
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.

Interpretation

In this Licence:

(a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';

(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 means the version of the standard, guideline or code of practice in force at the time of granting of this Licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Licence; and

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.

Conditions

General

1. The Licence Holder shall only accept waste on to the Premises if:

(a) it is of a type listed in Table 2; and

(b) the quantity accepted is below any quantity limit listed in Table 2; and

(c) it meets any specification listed in Table 2; and

(d) demonstrates compliance with the acceptance criteria for a Class I landfill.

Table 2: Waste acceptance

Waste type	Quantity limit	Specification[1]
Clean Fill	Combined limit of 475,000 tpa	None specified
Inert Waste Type 1		
Asphalt waste	5,000 tpa	None specified
Metal Dust	5,000 tpa	Metal dust only to be accepted in a damp stage from BGC premises located adjacent to Premises, as depicted on the 'Site Layout map' in Schedule 1.
Drilling Slurry	5,000 tpa	Must be in spadeable form
Special Waste Type 1	10,000 tpa	Cement bonded asbestos. No fibrous asbestos shall be accepted.
Green Waste	2,250 tpa	None specified Limit of 150 tonnes at any single point in time.
Inert Waste Type 2	195 tpa	Plastics free of chemical or putrescible waste residues. Limit of 13 tonnes at any single point in time.

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

2. The Licence Holder shall ensure that where waste does not meet the waste acceptance criteria set out in Condition 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 as soon as practicable.

3. 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 the risk classification procedure outlined in Section 3.3 of the Asbestos Guidelines as per Attachment 1(Classified Load).

4. The Licence Holder shall direct each accepted and Classified Load to an unloading area at the site for further inspection. The unloading area shall be appropriately designed and constructed to ensure the waste will not mix with other waste.

5. The Licence Holder shall dampen all Classified Loads prior to unloading and maintain the waste in a damp state throughout the inspection process using appropriate dust suppression measures.

6. The Licence Holder must inspect and maintain records for all unloaded waste in accordance with the low risk and high risk load procedure as outlined in section 3.4 of the Asbestos Guidelines as per Attachment 2.

7. The Licence Holder must continue to visually inspect waste on the Premises at all stages of the storage, sorting and screening process. Suspect asbestos identified at any stage of the process must be handled in accordance with the high risk load procedure outlined section 3.4 of the Asbestos Guidelines, as per Attachment 2.

8. The Licence Holder must maintain waste and processed waste on the Premises in at least two separate stockpile areas for unprocessed waste, processed waste tested for ACM and:

(a) unprocessed waste and processed waste areas must be kept clearly separated at a minimum 3 m distance;

(b) processed waste tested for ACM and processed waste awaiting testing for ACM must be clearly separated by a minimum 3 m distance OR clearly delineated and separated with impermeable barriers; and

(c) clearly visible and legible signage must be erected on individual stockpiles to clearly identify and delineate tested processed waste, untested processed waste and unprocessed waste.

9. The Licence Holder shall ensure that the asbestos content of any recycled output originating from Inert Waste Type 1 does not exceed the contamination limit of 0.001% w/w for asbestos (in any form).

10. The Licence Holder shall ensure that recycling outputs originating from Inert Waste Type 1 are sampled and tested in accordance with the Asbestos Guidelines, as outlined in Attachment 3.

Emissions

11. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for general Emissions described in Column 1 of Table 3 subject to the exclusions, limitations or requirements specified in Column 2 of Table 3.

Table 3: Authorised Emissions table

Column 1	Column 2
Emission type	**Exclusions/Limitations/Requirements**
Specified Emissions	
None specified	N/A
General Emissions	
Emissions which: • arise from the Primary Activities set out in Schedule 2	Emissions excluded from General Emissions are: • Unreasonable Emissions; or • Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or • Discharges of Waste in circumstances likely to cause Pollution; or • Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or • Emissions or Discharges which do not comply with an Approved Policy; or • Emissions or Discharges which do not comply with a prescribed standard; or • Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or • Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental *Protection (Unauthorised Discharges) Regulations 2004*.

Operations specifications

12. The Licence Holder shall ensure that wastes accepted onto the Premises or landfill are only subjected to the processes set out in Table 4 and in accordance with any process limits described in that Table.

Table 4: Waste processing

Waste type	Relevant Category / Categories	Processes(es)	Process limits
Clean Fill	62, 63, 70	Acceptance, screening and storage prior to removal off-site or disposal by landfilling	• All loads to be wet down prior to unloading, loading and processing. • Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises unless undertaken for the purposes specified in Condition 13. • Waste may only be stored, contained and landfilled in the 'Current Landfill Area' as depicted in the 'Site Layout Map' in Schedule 1 unless undertaken for the purposes specified in Condition 13. • Stockpiles are limited to 10 m or less in height such that the maximum height remains below either the natural ground level at the Premises boundary or the level of permanent shielding landforms at the Premises boundary (approximately 46m AHD).
Inert Waste Type 1	12, 62, 63, 70	Acceptance, crushing, screening and storage prior to removal off-site or disposal by landfilling	• All loads to be wet down prior to unloading, loading and processing. • Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises unless undertaken for the purposes specified in Condition 13. • Waste may only be stored, contained and landfilled in the 'Current Landfill Area' as depicted in the 'Site Layout Map' in Schedule 1 unless undertaken for the purposes specified in Condition 13. • Stockpiles are limited to 10 m or less in height such that the maximum height remains below either the natural ground level at the Premises boundary or the level of permanent shielding landforms at the Premises boundary (approximately 46m AHD).
Asphalt waste	62, 63	Acceptance and storage prior to removal off-site, re-use on-site or disposal by landfilling	• Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises. • Waste may only be stored and landfilled in the 'Current Landfill Area' as depicted in the 'Site Layout Map' in Schedule 1. • Stockpiles are limited to 10m or less in height such that the maximum height remains below either the natural ground level at the Premises boundary or the level of permanent shielding landforms at the Premises boundary (approximately 46m AHD).

Waste type	Relevant Category / Categories	Processes(es)	Process limits
Metal Dust	62, 63	Acceptance, validation, and storage prior to removal off-site or disposal by landfilling	• Crushing and screening of this waste is not authorised. • Waste must be maintained in a damp state at all times, or otherwise stabilised to minimise dust emissions. • All stockpiles are limited to 5m or less in height. • Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises. • Waste may only be stored, contained and landfilled in the 'Current Landfill Area' as depicted in the 'Site Layout Map' in Schedule 1.
Drilling Slurry	62, 63	Acceptance, validation and storage prior to removal off-site or disposal by landfilling	• Crushing and screening is not authorised. • Waste must only be stored in a temporary or permanent bunded infrastructure that meets 1 x 10^{-8} m/s permeability, capable of preventing surface run-off of leachate and slurry and which includes a leachate collection system. • Waste can only be landfilled at the Premises or re-used once it has dried. • Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises. • Waste may only be stored and contained in the 'Drill Slurry Drying Bed' and landfilled in the Current Landfill Area' as depicted in the 'Site Layout Map' in Schedule 1.
Special Waste Type 1	63	Acceptance and storage prior to removal off-site or disposal by landfilling.	• Crushing and screening is not authorised. • Special Waste Type 1 must not be deposited within 2m of the final tipping surface of the landfill. • Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises. • Waste may only be stored, contained and landfilled in the 'Asbestos Cell' as depicted in the 'Site Layout Map' in Schedule 1.

Waste type	Relevant Category / Categories	Processes(es)	Process limits
Green Waste	62	Acceptance and storage prior to removal off-site.	• Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises. • Waste may only be stored, contained and landfilled in the 'Green Waste' area as depicted in the 'Site Layout Map' in Schedule 1. • Stored on a pad as specified in Table 6.
Inert Waste Type 2	62	Acceptance and storage prior to removal off-site.	• Waste is not authorised to be stored or landfilled within 25 metres from the boundary of the premises. • Waste may only be stored, contained and landfilled in the 'Inert Waste Type 2' area as depicted in the 'Site Layout Map' in Schedule 1. • Stored on a pad as specified in Table 6

13. The Licence Holder is only authorised to undertake infilling of Clean Fill and Inert Waste Type 1 for the purposes of western boundary wall stabilisation in accordance with the following requirements:

(a) Infilling must only occur within the area identified as the Extent of Proposed Batter in the 'Map of wall stabilisation' in Schedule 1; and

(b) A maximum of 325,000 tonnes of waste is used for infill.

14. The Licence Holder shall ensure that the separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m.

15. All loads to be wet down prior to unloading, loading and processing.

16. The Licence Holder shall manage the landfilling activities to ensure:

(a) waste is levelled and compacted as soon as practicable after it is discharged; and

(b) waste is placed and compacted to ensure all faces are stable and capable of retaining rehabilitation material; and

(c) rehabilitation of a cell or phase takes place within 6 months after disposal in that cell or phase has been completed.

17. The Licence Holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 5 and that sufficient stockpiles of cover are maintained on site at all times.

Table 5: Waste processing

Waste type	Material	Depth	Timescales
Special Waste Type 1	Clean Fill, Type 1 Inert waste or validated spadeable Drilling Slurry	300mm	Immediately after deposit
		1000mm	By the end of the working day in which the asbestos waste was deposited
Clean Fill, Inert Waste Type 1, Asphalt Waste, Metal Dust, Spadeable Drilling Slurry	No cover required		

18. 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; and

(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.

19. The Licence Holder shall collect all windblown waste from the boundary to prevent windblown waste from escaping the Premises.

Infrastructure and equipment

20. The Licence Holder must ensure that the infrastructure and equipment specified in Column 1 of Table 6 is maintained in good working order and operated in accordance with the requirements specified in Column 2 of Table 6.

21. The Licence Holder shall ensure that the infrastructure or equipment specified in Table 6 is installed and operated in accordance with the specification of that table and located in the area depicted in the Site Layout Map in Schedule 1.

Table 6: Infrastructure and equipment controls table

Column 1	**Column 2**
Site infrastructure and equipment	**Operational requirements**
Drying bed	Drying bed for drilling slurry must be maintained with a minimum 200mm limestone base and 200mm limestone bunds.
2 x Water truck	Maintain an operational water cart with 10,000L capacity, and a standby water truck with 10,000L capacity. The water truck must be fitted with high volume side and dust lift-off Required for dust control
Landfill compactor	Maintain a 42 tonne landfill compactor in good working order
2 x Front end loader	To be maintained in good working order
Excavator	Maintain a 30 tonne excavator in good working order
300mm grizzly screen	To be located 17m below natural ground level in the area depicted in the 'Crusher / Screener Location' of the Site Layout Map in Schedule 1.
Terex Finlay Jaw Crusher (or similar model)	To be located 17m below natural ground level in the area depicted in the 'Crusher / Screener Location' of the Site Layout Map in Schedule 1.
Screening plant	To be located 17m below natural ground level in the area depicted in the 'Crusher / Screener Location' of the Site Layout Map in Schedule 1.

Column 1	Column 2
Site infrastructure and equipment	**Operational requirements**
Spray nozzles on crusher and screener	• Crushing and screening equipment must be fitted with water spray nozzles. • The spray reach and rate of flow of water spray nozzles must be maintained in good working order to ensure complete coverage of crushers and screeners. • Required for dust control
Dust covers on crusher discharge conveyor	• Crushing equipment must be fitted with a dust cover on the discharge conveyor. • The dust cover must be maintained in good working order to ensure dust emissions from the discharge conveyor are minimised. • Required for dust control
Abstraction bore	Must be maintained in good working order to ensure that an adequate water supply for the water pipeline is available at all times Required for dust control
Water pipeline for crushing and screening stockpile area	Must be maintained in good working order. Required for dust control
Green Waste storage pad	• Green Waste must only be stored in bunded infrastructure that meets 1 x 10^{-8} m/s permeability, capable of preventing surface run-off of leachate and subsurface infiltration of leachate. • A five (5) metre wide buffer shall be maintained around the Green Waste storage area. • Storage areas should be kept clean in between deliveries or loads.
Inert Waste Type 2 storage pad	• Inert Waste Type 2 must only be stored in infrastructure of low permeability, for example compacted crushed limestone to a minimum thickness of 300 mm and free from plant roots and reactive, soluble and organic matter. • A five (5) metre wide buffer shall be maintained around the Inert Waste Type 2 storage area.

22. The Licence Holder shall operate the infrastructure as specified in Table 6 to ensure:

(a) stockpiles and unsealed access roads are maintained in a damp state to prevent dust lift-off; and

(b) water spray nozzles on crushing and screening equipment, including conveyors, are functioning when the equipment is in operation.

23. The Licence Holder shall cease activities when infrastructure required for dust control, as specified in Table 6, fails or during weather conditions where dust emissions cannot be effectively controlled.

24. The Licence Holder may only operate the crushing and screening equipment between the hours of 7am to 5pm Monday to Friday and from 7am to 1pm on Saturday.

Monitoring - General

25. The Licence Holder shall ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;

(c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

26. The Licence Holder shall ensure that quarterly monitoring is undertaken at least 45 days apart.

Monitoring - Input and outputs

27. The Licence Holder shall undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Monitoring and recording of input and outputs

Input/Output	Parameter	Units	Averaging period	Frequency
Waste inputs	Clean Fill; Inert Waste Type 1; Metal Dust; Drilling Slurry; Special Waste Type 1; Aphalt Waste; Inert Waste Type 2; Green Waste	tonnes	N/A	Each load arriving at the Premises
Waste outputs	Waste type as defined in the Landfill Definitions	tonnes	N/A	Each load leaving or rejected from the Premises

Input/Output	Parameter	Units	Averaging period	Frequency
Product outputs	Crushed and screened products	tonnes	N/A	Each load leaving the Premises
Waste Inputs	Clean Fill and Inert Waste Type 1 infilled in accordance with Condition 13	tonnes	N/A	Each load being filled

Monitoring – Noise emissions

28. The Licence Holder shall undertake noise monitoring in accordance with the requirements of Table 8.

Table 8: Noise monitoring

Reference number	Requirement	Date of completion
NM1	The Licence Holder shall undertake noise monitoring of the Premises during normal operating conditions at the Premises boundary. A report on the noise monitoring shall be prepared in accordance with Part 3 of the Noise Regulations. The report shall be submitted to the CEO and shall include: (a) methods used for monitoring of noise; (b) an assessment of whether noise emissions from the Premises comply with the assigned noise level in the Noise Regulations; and (c) if improvements are required to comply with the prescribed standard, the Licence Holder is required to provide a report outlining the steps and timeframes involved in meeting that specification.	Noise monitoring to be completed within two months of the Licence amendment being granted and report to be provided to the CEO within one month of the monitoring being completed.

Monitoring – Ambient environmental quality

29. The Licence Holder shall undertake the monitoring iTable 9 to the specifications in that table.

Table 9: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
MB1 as depicted in the Site Layout map in Schedule 1 Two monitoring bores installed according to Condition 38 and IC2	Standing water level	m(AHD)	Spot sample	Quarterly
	pH			
	Electrical conductivity	µS/cm		
	Aluminium	mg/L		
	Arsenic			
	Cadmium			
	Chromium			
	Copper			
	Iron			
	Mercury			
	Lead			
	Manganese			
	Nickel			
	Zinc			
	Potassium			
	Selenium			
	Chloride			
	Sulphate			
	Total acidity			
	Total alkalinity			
	Total aluminium			
	Total iron			
	Total nitrogen			
	Total phosphorus			
	Total Dissolved Solids (TDS)			
	Organochlorine pesticides			
	BTEX (benzene, toluene, ethylbenzene, xylene)			
	Polycyclic aromatic hydrocarbons (PAHs)			
	Polychlorinated biphenyls (PCBs)			
	Total petroleum hydrocarbons (TPH)			
	Total Suspended Solids (TSS)			
	Nitrate			

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
	Nitrite		Spot sample	Quarterly
	Colour	HU		
	Turbidity	NTU		
	Ionic Balance	percent		
	Total coliforms	cfu/100mL		
	Thermotolerant coliforms			
	E. coli			

Record-keeping

30. 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 works conducted in accordance with Condition 13 of this Licence;

(c) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Condition 20 of this Licence;

(d) monitoring undertaken in accordance with Conditions 27, 28 and 29 of this Licence;

(e) Reportable Events reported in accordance with Condition 36 of this Licence; and

(f) complaints received under Condition 31 of this Licence.

In addition, the Books must:

(g) be legible;

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

(i) be retained for at least 6 years from the date the Books were made; and

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

31. 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.

32. The Licence Holder must submit to the CEO, no later than 1 August, a Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence for the preceding Annual Period.

33. The Licence Holder must submit to the CEO, no later than 1 August, an Annual Environmental Report containing the information listed in Table 10 for the Annual Period.

Table 10: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format
-	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
9 and 10	Recycled outputs sampling and testing data	None specified
27	Summary of monitored and recorded inputs and outputs	None specified
29	Monitoring results of ambient groundwater quality: - An interpretive summary and assessment of ambient groundwater quality monitoring results against relevant assessment levels for water as published in the *Contaminated Sites Act (2003)* guidance published by the Department and the *Australian Drinking Water Guidelines* (2011; 2018 update); - An interpretive summary and assessment of ambient groundwater quality monitoring results against previous monitoring results. Trend graphs shall be provided in support of this assessment.	A summary of the results should be presented in tabulated form within the body of the report as well as onto site drawings, where appropriate.
31	Complaints summary	None specified

34. The Licence Holder shall submit the information in Table 11 to the CEO according to the specifications in that table.

Table 11: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Format
Table 7	Waste infill records demonstrating compliance with Condition 13	Not applicable	None specified

35. The Licence Holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

Notification

36. The Licence Holder shall ensure that the parameters listed in Table 12 are notified to the CEO in accordance with the notification requirements of the table.

Table 12: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement	Format[1]
-	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	None specified
13 and 16	Commencement of infilling activities	Not later than ten business days prior to infilling commencing	Report including map, list of GPS coordinates or electronic shapefile defining the detailed design of the wall stabilisation area
13 and 16	Cessation of infilling activities	Within three business days of infilling ceasing.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the EP Act

Improvements

37. The Licence Holder shall complete the improvements in Table 13 by the date of completion in Table 13.

38. Following completion of IC2, the two groundwater monitoring bores must be monitored and reported to the CEO according to the requirements of condition 29.

Table 13: Improvement program

Improvement reference	Improvement	Date of completion
IC1	The Licence Holder shall submit to the CEO a report that assesses the permeability of the Drilling Slurry drying bed(s). If the drying bed(s) does not achieve a hydraulic conductivity of 1 x 10^{-8} m/s or less, representative across the respective infrastructure, the Licence Holder is required to provide a report outlining the steps and timeframes involved in meeting that specification.	Within two (2) months of the grant date of this amended Licence
IC2	The Licence Holder shall install a minimum of two groundwater monitoring bores down hydraulic gradient of the of Premises activities. The bores are required to be constructed according to the ASTM D5092-04(2010)e1 *Standard practice for design and installation of groundwater monitoring wells* The bores shall be logged as per AS1726-1993 for the unified classification system for soils.	Within six (6) months of the grant date of this amended Licence
IC3	The Licence Holder shall provide to the CEO, a quality construction and assurance report from an independent third party to certify that the groundwater monitoring bores specified in IC2, have been installed as per the requirements of IC2, including bore logs required under IC2.	Within one (1) month of the bores being installed
IC4	The Licence Holder shall provide to the CEO a report that assesses the permeability of the Green Waste bunded storage area. If the area does not achieve a hydraulic conductivity of 1 x 10^{-8} m/s or less, representative across the respective infrastructure, the Licence Holder is required to provide a report outlining the steps and timeframes involved in meeting that specification.	Within thee (3) months of the Green Waste bunded storage area being constructed

Improvement reference	Improvement	Date of completion
IC5	The Licence Holder shall prepare an emergency management procedure that includes as a minimum: (a) addresses foreseeable emergency situations such as fire that could have an effect on water resources; (b) is available on site; (c) lists emergency contact details; (d) details procedures and assigned roles in conducting effective emergency response procedures; (e) details training for staff to effectively carry out the emergency procedures; (f) details specific actions to handle and dispose of water or other materials (such as contaminated fire-fighting water in bunding) that if left could affect water resources.	Within 3 months of the grant date of this amended Licence

Schedule 1: Maps

Premises map

The Premises are shown in the map below.

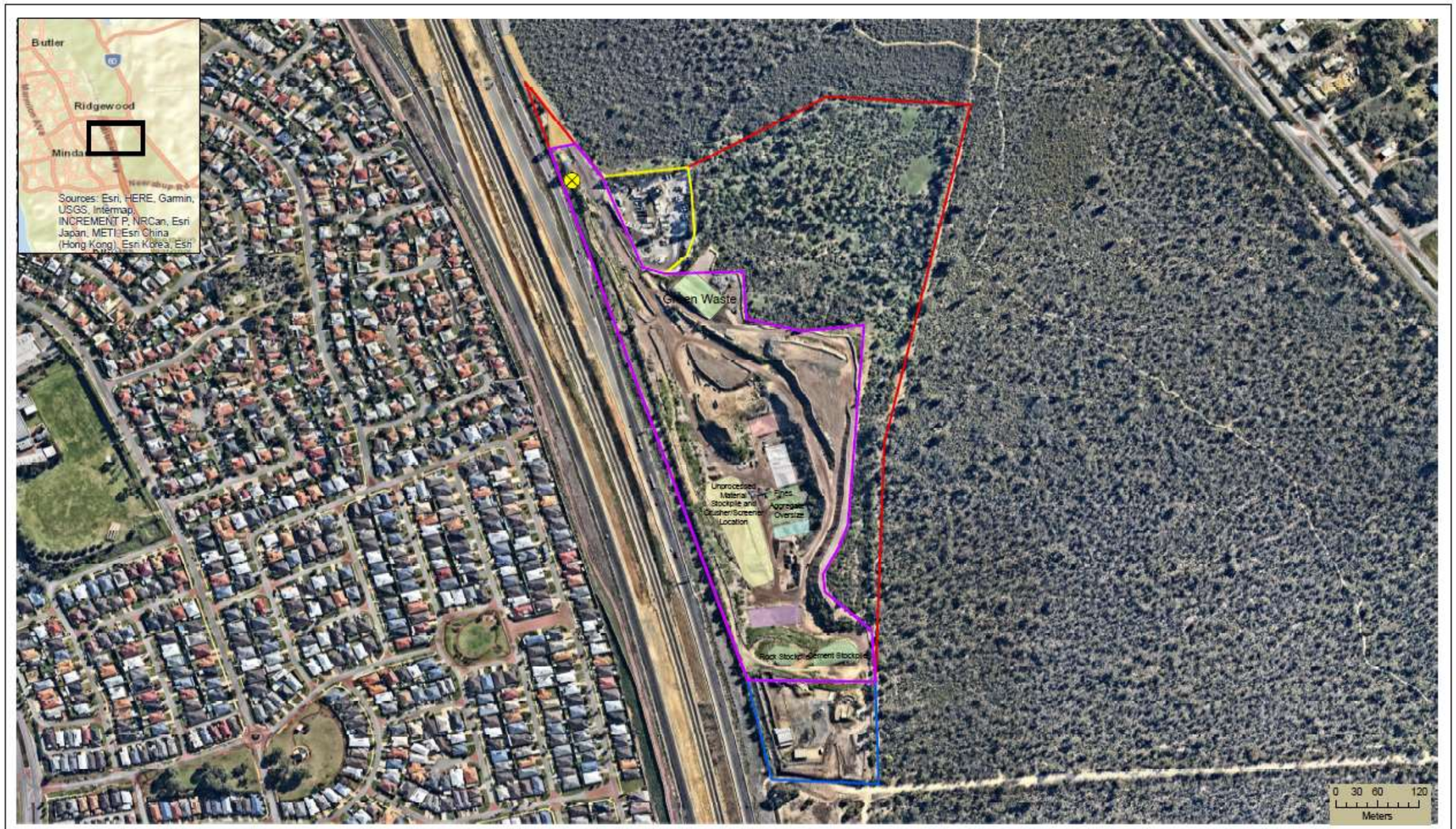


Figure 1: Site Layout

SERS
Site Environmental and Remediation Services

Head Office: 281 Newcastle Street Northbridge WA 6003
Postal: PO Box 377 Northbridge Perth WA 6865
T: +61 8 92202000 F: +61 8 92202010
E: admin@sers.net.au W: www.sers.net.au

Job No: 004
Client: Adrian Brajkovich
Address: 220 Hester Avenue, Neerabup
Source: Nearmaps

Scale: 1:5,160
Original size: A3
Imagery from: 15/08/2019

Date drawn: 23/09/2019
Revision: 5
Drawn by: S.P
Checked by: R.M

File: N:\A SERS\GIS\Projects\ MXD\

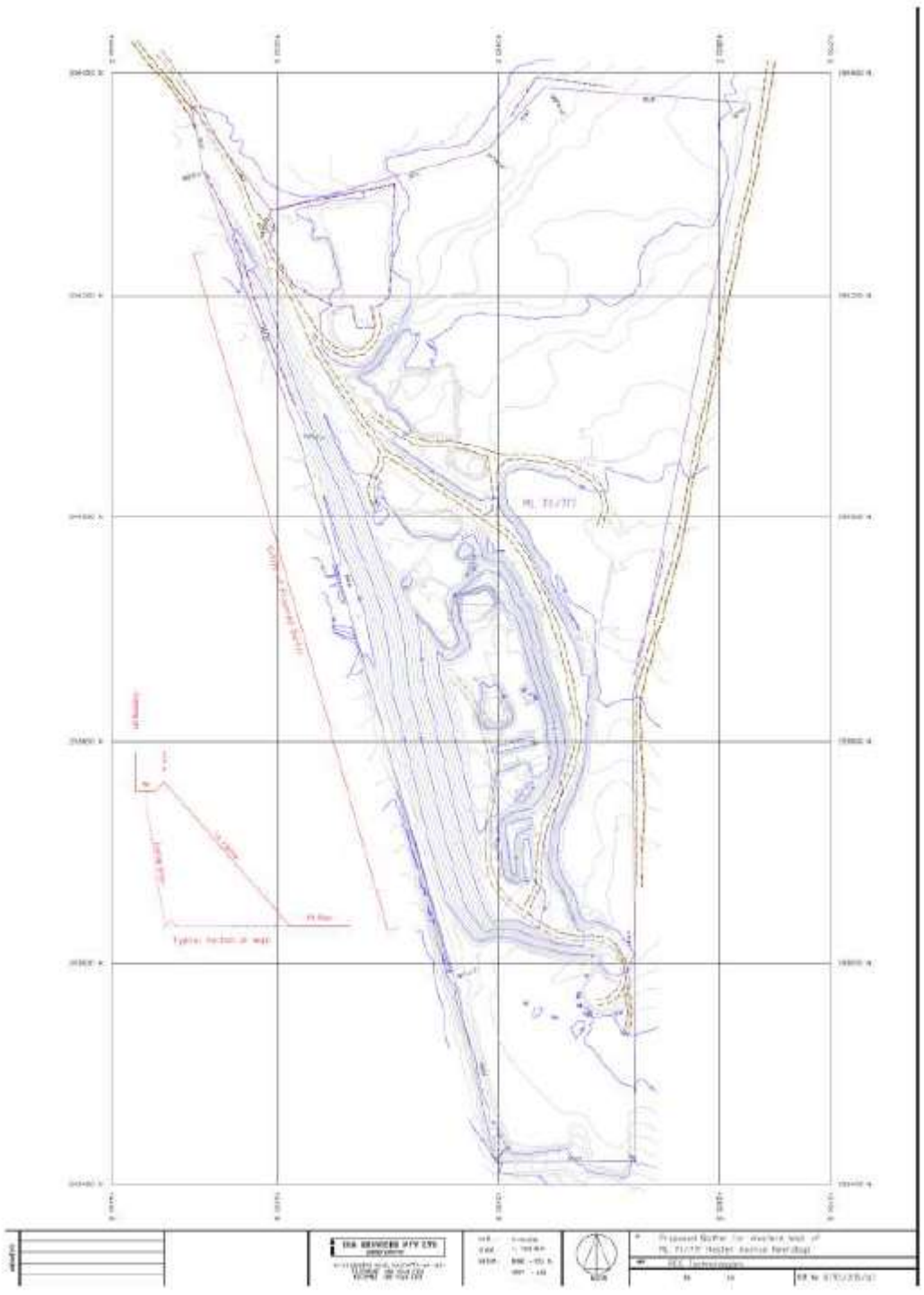
N

Legend

- MB1 Well
- Current Landfill Area
- Green Waste
- Plant Maintenance Area
- Drill Slurry Drying Bed
- Processing Area (Crusher and Screener)
- Inert Waste Type 2
- BCG Premises
- Leighton's Premises
- Site Boundary
- Site Access
- Weighbridge
- Site Amenities
- Product Stockpile
- Asbestos Cell

Map of wall stabilisation

Map of wall stabilisation fill area, showing the extend of the proposed batter



Premises boundary

The Premises boundary is defined by the coordinates in Table 14.

Table 14: Premises boundary coordinates

Position No.	Latitude	Longitude
A	31° 40’ 22.98” S	115° 44’ 00.19” E
B	31° 40’ 27.05” S	115° 44’ 03.64” E
C	31° 40’ 27.61” S	115° 44’ 03.80” E
D	31° 40’ 27.96” S	115° 44’ 03.65” E
E	31° 40’ 28.13” S	115° 44’ 04.32” E
F	31° 40’ 29.77” S	115° 44’ 04.63” E
G	31° 40’ 29.72” S	115° 44’ 05.35” E
H	31° 40’ 30.58” S	115° 44’ 05.87” E
I	31° 40’ 30.20” S	115° 44’ 08.06” E
J	31° 40’ 28.19” S	115° 44’ 08.25” E
K	31° 40’ 27.36” S	115° 44’ 07.07” E
L	31° 40’ 27.37” S	115° 44’ 05.74” E
M	31° 40’ 27.05” S	115° 44’ 03.64” E
N	31° 40’ 25.49” S	115° 44’ 11.24” E
O	31° 40’ 23.56” S	115° 44’ 13.83” E
P	31° 40’ 23.94” S	115° 44’ 20.08” E
Q	31° 40’ 40.96” S	115° 44’ 15.15” E
R	31° 40’ 49.97” S	115° 44’ 16.54” E
S	31° 40’ 50.19” S	115° 44’ 10.36” E
T	31° 40’ 31.18” S	115° 44’ 03.88” E
U	31° 40’ 25.80” S	115° 44’ 00.82” E

Schedule 2: Primary activities

At the time of assessment, Emissions and Discharges from the following Primary Activities were considered in the determination of the risk and related Conditions for the Premises.

The Primary Activities are listed in Table 15:

Table 15: Primary Activities

Primary Activity	Premises production or design capacity
Category 13 – Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned.	200,000 tonnes per annual period
Category 62 – Solid waste depot; premises on which waste is stored, or sorted, pending final disposal or re-use.	100,000 tonnes per annual period
Category 63 – Class I inert landfill: premises on which waste (as determined by reference to the waste type set out in the document entitled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	500,000 tonnes per annual period
Category 70 – Screening, etc. of material: premises on which material extracted from the ground is screened, washed, crushed, ground milled, sized or separated.	50,000 tonnes per annual period

Site layout

The Primary Activity infrastructure and equipment is set out on the Premises in accordance with the site layout specified on the Premises map in Schedule 1.

Attachment 1: Section 3.3 of the Asbestos Guidelines

- Ensuring a "no asbestos" clause is included in any contracts with C&D waste suppliers;
- Installing a clearly visible sign saying "No Asbestos" is present at the entry to the facility;
- Establishing a system to record the details of loads arriving/received at the site which have been found to contain asbestos.

DEC has a supply of brochures that outline the rules on disposal of asbestos loads that can be handed to customers. Please contact DEC's Waste Management Branch on (08) 6467 5323 for copies.

3.3 Acceptance procedures

When waste arrives at the recycling facility, acceptance procedures must serve to confirm that the characteristics of the waste are consistent with the waste types permitted by the Part V licence and to determine the risk of the load containing asbestos.

To follow on from the pre-acceptance procedures, all persons bringing waste onto the premises must be asked to sign a declaration or provide a 'customer warranty' on a vehicle load specific basis confirming that their load is free from asbestos. The associated documentation should be retained on the premises and be available for DEC to inspect Where an individual is not prepared to sign this disclaimer or provide such a warranty the load shall be refused entry.

All loads must be visually inspected when they arrive at the recycling site. Where the inspection identifies that the wastes are not permitted by the licence and/or asbestos is visually identified in the load it shall be rejected for acceptance. A record of all rejected loads must be maintained on the premises and be available for DEC to inspect. As a minimum, a record must be made of the waste producer, waste carrier, registration number of the vehicle and the date of rejection.

The risk of a load containing asbestos is related to the type and source of the waste. In general, buildings and structures constructed after 1990 are unlikely to have asbestos containing materials within them, whereas buildings and structures constructed before this date may have been built using asbestos containing materials.

Because large buildings and structures undergo regulated asbestos removal programs and inspections before they are demolished the probability of asbestos being present in the demolition debris should be low. However, a risk of contamination can remain from asbestos formwork embedded or attached to concrete columns that cannot be readily identified through the asbestos clearance certification processand from asbestos piping from reclaimed road, car park areas and water supply systems.

It is also common for mixed waste from unknown sources, particularly those in skip bins or from small-scale demolition or refurbishment activities to contain amounts of asbestos waste. These sources must be considered high risk.

To determine the risk of an incoming load containing asbestos the gatehouse operator shall establish:

- The source of the load including the site location and if possible the age of any building or structure from which the C&D waste originated;

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- 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 and managed as outlined in the following section. 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 below.

Once classified, each load must be directed to the appropriate area for unloading and further inspection in line with the following sections.

Risk Classification Matrix			
	Type of load		
Material Type	**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 C & D material (eg a small trailer with a shallow load, then consideration may be given to classifying these loads as low risk

(Risk Matrix Classification *adapted from WorkSafe Victoria 2006 and WMAA 2009*)

3.4 Load inspection after acceptance

Each accepted and classified load shall be directed to an unloading area at the site which is appropriately designed and constructed to ensure the waste will not mix with other waste. Where feasible, separate unloading areas shall be provided for low risk and high risk wastes.

All loads shall be dampened prior to unloading and maintained in a dampened state throughout the inspection process. Operators will need to ensure there are adequate facilities on the premises to achieve this.

Low risk load procedure

Loads classified as "low risk", must be visually inspected while the material is being unloaded to determine whether any asbestos can be identified.

If suspect fibrous asbestos (FA) or asbestos fines/fibres (AF) are detected, the load must be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Appendix A, redirected to an appropriately authorised disposal facility. If suspect ACM is identified, the load must be reclassified as "high risk" and continue to be processed in accordance with the high risk procedure below. Where the visual inspection confirms that the

load is clear of suspect ACM, FA and AF, the load may then be added to the waste stockpiles awaiting further processing eg crushing and screening.

High risk load procedure

Loads classified as "high risk" must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides of the material to be undertaken. One method of achieving this is to spread the material to a depth of less than 30cm and to turn over the material with the use of an excavator or similar. Where appropriate, larger sections of concrete should be inverted to permit a visual check for embedded or underlying asbestos product debris.

If suspect FA or AF are detected, the load must be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Appendix A, and redirected to an appropriately authorised disposal facility.

Where suspect ACM is identified within a load and is not capable of being easily removed by hand, the load must be rejected and should be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Appendix A, 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:

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 disposal facility. If testing confirms the material is not ACM the waste can be added to the stockpile awaiting further processing; or

2. 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 awaiting further processing.

Records must be kept to ensure that the process from receipt of C&D material to the completion of the unloading procedure is auditable and that any loads found to contain suspect asbestos can be traced back to the customer and originating site. Through Part V licence conditions, DEC will require records of loads found to contain asbestos and action taken by the C&D recycler to address this issue with the customer, to be submitted on a regular basis. DEC will take follow up action with customers delivering asbestos containing waste to the premises as necessary.

Attachment 2: Section 3.4 of the Asbestos Guidelines

- 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 and managed as outlined in the following section. 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 below.

Once classified, each load must be directed to the appropriate area for unloading and further inspection in line with the following sections.

Risk Classification Matrix			
	Type of load		
Material Type	**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 C & D material (eg a small trailer with a shallow load, then consideration may be given to classifying these loads as low risk

(Risk Matrix Classification *adapted from WorkSafe Victoria 2006 and WMAA 2009*)

3.4 Load inspection after acceptance

Each accepted and classified load shall be directed to an unloading area at the site which is appropriately designed and constructed to ensure the waste will not mix with other waste. Where feasible, separate unloading areas shall be provided for low risk and high risk wastes.

All loads shall be dampened prior to unloading and maintained in a dampened state throughout the inspection process. Operators will need to ensure there are adequate facilities on the premises to achieve this.

Low risk load procedure

Loads classified as "low risk", must be visually inspected while the material is being unloaded to determine whether any asbestos can be identified.

If suspect fibrous asbestos (FA) or asbestos fines/fibres (AF) are detected, the load must be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Appendix A, redirected to an appropriately authorised disposal facility. If suspect ACM is identified, the load must be reclassified as "high risk" and continue to be processed in accordance with the high risk procedure below. Where the visual inspection confirms that the

load is clear of suspect ACM, FA and AF, the load may then be added to the waste stockpiles awaiting further processing eg crushing and screening.

High risk load procedure

Loads classified as "high risk" must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides of the material to be undertaken. One method of achieving this is to spread the material to a depth of less than 30cm and to turn over the material with the use of an excavator or similar. Where appropriate, larger sections of concrete should be inverted to permit a visual check for embedded or underlying asbestos product debris.

If suspect FA or AF are detected, the load must be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Appendix A, and redirected to an appropriately authorised disposal facility.

Where suspect ACM is identified within a load and is not capable of being easily removed by hand, the load must be rejected and should be isolated, kept wet and once appropriately contained in accordance with the Asbestos Factsheet in Appendix A, 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:

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 disposal facility. If testing confirms the material is not ACM the waste can be added to the stockpile awaiting further processing; or

2. 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 awaiting further processing.

Records must be kept to ensure that the process from receipt of C&D material to the completion of the unloading procedure is auditable and that any loads found to contain suspect asbestos can be traced back to the customer and originating site. Through Part V licence conditions, DEC will require records of loads found to contain asbestos and action taken by the C&D recycler to address this issue with the customer, to be submitted on a regular basis. DEC will take follow up action with customers delivering asbestos containing waste to the premises as necessary.

Attachment 3: Section 4.3 of the Asbestos Guidelines on product testing

4 Monitoring and Testing

Monitoring must be undertaken to confirm that risk management measures are effectively meeting their objectives. This shall include qualitative and quantitative monitoring and product testing.

4.1 Qualitative monitoring

Site operatives must undertake visual inspections whilst the facility is operational to ensure that fugitive emissions of dust are being adequately controlled and are not being carried outside of the premises. Where fugitive dust releases are identified their source must be investigated and all reasonable and practicable measures implemented to prevent or minimise the release.

Where risk management measures are ineffective or likely to be ineffective at preventing visible dust crossing the site boundary, for example during adverse weather conditions, waste processing activities must cease until additional measures have been put in place to prevent the discharge or until the adverse weather conditions have passed.

4.2 Quantitative environmental monitoring

On some sites it may be necessary for ambient dust or asbestos fibre air monitoring to be undertaken to provide further confidence in risk management measures. Such monitoring may be required where recycling sites are located in close proximity to sensitive receptors, are within a relevant Environmental Protection Policy area or have a poor compliance history relating to fugitive dust control. Where quantitative dust monitoring is not proposed, the proponent/operator must provide a risk based justification as to why it is not considered necessary at their premises.

Dust monitoring provides a useful surrogate measure to evaluate the potential generation and distribution of airborne dust and asbestos fibres and will normally be sufficient on most sites. Dust monitoring equipment must demonstrate that dust levels are kept as low as reasonably possible. Tapered Element Oscillating Microbalance (TEOM) (or equivalent) equipment is preferred to provide continuous and accurate perimeter air monitoring for community protection. Any site perimeter monitoring for this purpose should be conducted to ensure compliance with the National Environmental Protection Measure (NEPM) ambient air 24 hour PM_{10} goal of 50 ug/m^3.

Where air quality monitoring is required, an air quality monitoring and reporting strategy must be developed by a person suitably experienced in dust/asbestos sampling and exposure assessment and any associated analysis be undertaken by a laboratory accredited by NATA for this purpose.

4.3 Product testing and supply

To ensure that recycled products have been produced to the required specification in relation to asbestos content it is necessary for product testing to be undertaken. The testing procedures detailed in this section have application for the three main recycled products:

1. Recycled drainage rock 20-27mm;

2. Recycled sand, screened to <10mm; and
3. Recycled road-base, <19mm.

The testing must be documented as outlined under Section 5.3.

Product specification

To ensure the health of those using or coming into contact with recycled C&D products is protected, the asbestos content (in any form) of any recycled products must not exceed 0.001% asbestos weight for weight (w/w).

Inspection and sampling requirements

All types of recycled product must be inspected and/or sampled and tested for ACM, FA and AF, as outlined below. Inspections and sampling may be undertaken by staff employed by the licensee as long as they have received the required asbestos training for operational staff set out in section 5.2.

ACM and FA are subject to visual inspection and sampling procedures since they are larger in size (>7mm) and AF (<7mm) 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 the 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 if necessary 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 asbestos material 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 1000m^3 of product.

Conveyor sampling

Sampling of road base and screened sand products must occur at a minimum rate of 1 sample per 70m^3 of a product output. Suspect asbestos material or areas must be targeted for sampling.

Sample treatment

Each sample collected must be at least 10 litres in volume and then be divided into 2 size fractions (>7mm and <7mm) in the field by sieving though a 7mm screen or spread out for inspection on a contrasting colour fabric. The >7mm fraction should be examined for any suspect asbestos material and this be retained to calculate the level of contamination.

The <7mm 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.

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, DEC may authorise a reduced product testing rate including down to 5 locations per 4000 tonnes (1 sample per 600m^3) of product.

The criteria that DEC will use to consider and determine a reduction in product sampling frequency are:

1. Activities at the premises have been validated through a DEC inspection or audit to comply with these guidelines;
2. DEC has confirmed through an inspection or audit that the conditions of the Part V licence are being met;
3. DEC has not undertaken any enforcement action in relation to the activities at the premises in the last 6 months;
4. Product testing has demonstrated that the product specification has been consistently achieved at the premises for a continuous 6 month period;
5. The presence of mitigating factors such as best practice management measures, high control of source material or use of the product for low risk purposes;
6. The quantity of waste processed in the last 6 months and the different sources/types of material processed at the premises; and
7. DoH has agreed to the reduction in product sampling rate at the premises.

All requests for a reduced product sampling rate must be submitted in writing to the relevant DEC Industry Regulation Regional Leader for the Premises, details of which can be found in the interpretation section of the Part V licence for the Premises.

DEC will refer all requests to the DoH and operators must ensure that all requests include sufficient evidence, particularly in relation to product testing, to support compliance with the above criteria.

Proponents should note however, that despite a premises meeting the above reduced sampling criteria, there may be occasions where a reduced sampling rate is not approved by DEC. This

may occur for example where the site is close to sensitive receptors, contentious and/or there is a need to provide public confidence in the activities at the site.

Where a reduced sampling rate is approved at a premises, DEC will provide written notification of the approval and will continue to closely monitor that premises to ensure it remains compliant with the reduced sampling criteria. DEC's monitoring of the premises will be further supported by the annual process audits required by section 5.1 and the results of the product sampling.

DEC will withdraw the approval to implement a reduced sampling frequency where the reduced sampling criteria are not being met on an on-going basis. Where DEC withdraws approval for a reduced sampling frequency, proponents will be provided with the reasons for the withdrawal.

In the event that approval for a reduced sampling rate is withdrawn by DEC, proponents will be required to make a new reduced sampling frequency request and demonstrate that they have:

1. Implemented appropriate measures to prevent a re-occurrence of the non-compliance that caused the previous agreement for a reduced sampling frequency to be withdrawn; and that
2. The product specification (sampled at the 40 samples per 4000 tonnes rate) has been consistently met for a 6 month period following the implementation of the measures identified in 1. above.

Sample Analysis Method

>7mm sample fractions

Asbestos concentrations (ACM and FA) should be calculated in accordance with the methods detailed in section 4.1.7 of Department of Health (DoH), 2009, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia*. As detailed in the DoH Guidelines, averaging asbestos levels across the stockpile is not appropriate and asbestos levels within each sample should be reported.

<7mm sample fractions

Each <7mm sample fraction must be analysed for 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* (AS4964–2004) or be demonstrated to be able to achieve the equivalent level of results to this Australian Standard.

AS4964-2004 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 (DS) 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 used, however DEC 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 specification for asbestos content, samples must be a minimum of 500mL 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. A number of laboratories have developed such semi-quantitative methods for the analysis of low levels of asbestos. Techniques include:
   - The extraction and weighing of fibre bundles or fibre cement material from the total sample; and
   - Measuring the width and length (ie volume) of individual fibre by Phase Contrast Microscopy (PCM) and calculating the weight of fibres in the extracted sub-sample.

The use of either of these methods is considered acceptable to DEC.

Whatever analysis methods are adopted by an operator, DEC expects a number of assessment based statements to be included in all laboratory analytical reports. These include:

- Details of the sample size;
- A Statement of Limit of Detection of the analysis;
- Results in relation to asbestos detected or not – note that AS4964-2004 allows for a nil detection if the asbestos is less than a certain concentration and is non-respirable however DEC would consider a positive result to exceed the 0.001% w/w limit;
- Description of any asbestos detected; and
- Estimate of the concentration of asbestos detected if practical to do so.

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 criteria then that stockpile or product process should be deemed potentially contaminated and considered for off-site disposal as asbestos waste, 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 eg 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 criteria, 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 $10m^2$ 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 >7mm sieve sampling in regard to the recycled sand material and roadbase. In this case a $1cm^3$ fragment of ACM or FA would be deemed to exceed the specification for a 10L 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.

Product Supply

Recycled products should only be supplied to customers from stockpiles that have been sampled and tested in accordance with section 4.3 and shown to conform to the product specification.