Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence Number	L9098/2017/1
Licence Holder	Delstrat Pty Ltd
ACN	009 433 658
Registered business address	Level 3 216 St Georges Terrace PERTH WA 6000
File Number	DER2017/000386
Duration	14 May 2018 to 13 May 2038
Date of issue	Thursday, 10 May 2018
Prescribed Premises	Category 13 Category 61A
Premises	Delstrat 19 Destiny Way WANGARA WA 6065 Lot 4 on Diagram 30763 Certificate of Title Volume 329 Folio 117A

This Licence is granted to the Licence Holder, subject to the following conditions, on 10 May 2018, by:

Date signed: 10 May 2018
Rebecca Kelly
MANAGER LICENSING – WASTE INDUSTRIES
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. A licence that has ceased to have effect due to non-payment of annual licence fees continues to exist; however, it ceases to provide a defence to an offence under s.74A of the EP Act.

Late fees are a component of annual licence fees and should a Licence Holder fail to pay late fees within the time specified the licence will similarly cease to have effect.

Definitions and interpretation

Definitions

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

Table 1: Definitions

Term	Definition
Acceptance Criteria	has the meaning defined in Landfill Definitions
ACM	Asbestos Containing Material
ACN	Australian Company Number
Annual Period	means a 12 month period commencing from 1 January until 31 December in each 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).
Averaging period	means the time over which a limit is measured or a monitoring result is obtained.
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 33 Cloisters Square PERTH WA 6850 info-der@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 DER 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 moist to the touch
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.
DER Asbestos Guidelines	means document titled "Guidelines for managing asbestos at construction and demolition waste recycling facilities", published by the Department of Environment and Conservation, as amended from time to time.
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation.
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).
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
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 Chief Executive Officer of the

	Department of Environment 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.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
Normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to 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.
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.
Start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions.
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.

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

Environmental compliance

1. The ***Licence Holder*** must comply with the EP Act and all regulations prescribed under the EP Act applicable to the Premises, including:

(a) the duties of an occupier under s 61;

(b) the duty to notify the CEO of discharges of waste under s 72; and

(c) not causing, or doing anything that is likely to cause, an offence under the EP Act,

except where the ***Licence Holder*** does something in accordance with a Condition which expressly states that a defence under s 74A of the EP Act may be available.

Infrastructure and equipment

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

Table 2: Infrastructure and equipment controls table

Column 1	**Column 2**
Site infrastructure and equipment	**Operational requirements**
Hardstand	Minimum 200mm crushed road base hardstand covering the whole of the operational and storage areas.
2011 Atlas Copco PC3 Impact Crusher	• Located at the position labelled 'Crushing Plant' in Schedule 1;

Column 1	Column 2
Site infrastructure and equipment	**Operational requirements**
	• Fitted with water sprays; and • 80 tonne/hour capacity.
McCloskey R105 Screener	• Located at the position labelled 'Screening Plant' in Schedule 1; • Fitted with water sprays; and • 80 tonne/hour capacity.
Picking Station	• Located at the position labelled 'Picking Station' in Schedule 1; • Fitted with water sprays.
Soak well	• Located at the position labelled "Soak well' in Schedule 1; • Must be kept free of litter and debris.
Water sprays/sprinklers on crushing plant	Must be functioning when the equipment is in operation.
Water sprays/sprinklers on screening plant	
Water sprays/sprinklers on picking station	
Hose/sprinkler systems	• Operate when visible dust is generated from stockpile surfaces on the premises. • Operate proactively subject to weather forecasting over a 24 hour period. • Reticulated sprinklers must be capable of wetting down the entire surface of all stockpiles on the premises that are subject to dust lift-off simultaneously or within a period of thirty minutes. • Spray reach and rate of flow of sprinklers must be sufficient to reach the top of all stockpiles specified above. • Spray reach and rate of flow of sprinklers must be maintained in good working order.
Front end loader(s)	N/A

Waste acceptance and processing controls

3. The Licence Holder must only accept wastes at the Premises if it is of a type specified in Column 1 of Table 3 and is below the quantity specified in Column 2 of Table 3 and as per the specification listed in Column 3 of Table 3.

Table 3: Waste Acceptance table

Column 1	**Column 2**	**Column 2**
Waste Type	**Quantity Limit**	**Specification**
Clean fill	Combined total of 100,000 tonnes per annual period	Limited to waste received from Delstrat's own sites
Type 1 Inert Waste		Limited to waste received from Delstrat's own sites Waste containing visible asbestos or ACM shall not be accepted.

4. The Licence Holder shall ensure that where waste does not meet the waste acceptance criteria set out in condition 3 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.

5. The Licence Holder shall ensure that any waste that does not conform to the waste acceptance criteria in Table 3 due to asbestos content, is covered or bagged and kept within a clearly identified, labelled, segregated and secure container prior to being removed off site to an appropriate authorised facility within 48 hours.

6. The Licence Holder must advise all source material providers that asbestos or potentially asbestos contaminated material is not accepted at the Premises.

7. The Licence Holder must include a 'no asbestos' clause in all contracts with all source material providers.

8. The Licence Holder must maintain a clearly visible sign saying 'No Asbestos' at the entry to the Premises.

9. 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 Attachment 1.

10. Where the inspection required by condition 9 confirms that the load does contain asbestos or ACM, the Licence Holder must:

(a) reject the waste for acceptance;
(b) maintain accurate records of all rejected loads on the Premises and the documentation must be made available to DER officers upon request; and
(c) record the details of the waste source, material carrier, registration number of the vehicle and date of rejection.

11. 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.

12. 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.

13. 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 Attachment 2.

14. 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 in Attachment 2.

15. 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.

16. 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).

17. The Licence Holder shall ensure that recycling outputs originating from Inert Waste Type 1 are sampled and tested in accordance with Attachment 3.

18. The Licence Holder must only store and process the materials specified in column 1 of Table 4 in accordance with the requirements specified in column 2 of Table 4.

Table 4: Storage and Processing Requirements

Column 1	**Column 2**
Material	**Storage and Processing Requirements**
Clean Fill	• All loads to be wet down prior to unloading. • Stockpiles must not exceed 5m in height from the base of the stockpile. • Stockpiles are maintained in a damp state, stabilised using spray binders, grassing or otherwise provided with wind breaks to mitigate dust lift-off.
Inert Waste Type 1	

19. The Licence Holder must undertake the monitoring and recording:

(a) for inputs and outputs specified in column 1 of Table 5;

(b) for the parameters listed in column 2 of Table 5;

(c) in the units specified in column 3 of Table 5; and

(d) at the frequency specified in column 4 of Table 5.

Table 5: Monitoring and recording of inputs and outputs

	Column 1	Column 2	Column 3	Column 4
	Input/Output	**Parameter**	**Units**	**Frequency**
1	Waste Inputs	Material type as detailed in Table 1	Tonnes	Each load arriving at the Premises
2	Waste Outputs	Waste type as defined in the Landfill Definitions		Each load leaving or rejected from the Premises

20. The Licence Holder must report to the CEO a summary of the results of the monitoring required by Condition 19 for the previous Annual Reporting Period by 1 March each year.

Operational controls

21. The Licence Holder shall restrict all vehicle movements at the premises to 10 km/hour or less.

22. The Licence Holder is limited to operating the crushing and screening plant between the hours of 0700 to 1700, Monday to Friday and 0730 to 1700 on Saturday.

23. The Licence Holder shall collect all windblown waste from the boundary fences, access points and soak wells as required to prevent windblown waste from escaping the Premises.

Specified Actions

24. The Licence Holder is to undertake noise monitoring in accordance with the requirements of Column 1 of Table 6, within the timeframe specified in column 2 of Table 6.

Table 6: Noise monitoring requirements

	Column 1	Column 2
	Requirement	**Date of completion**
1	The Licence Holder shall undertake noise monitoring of the Premises during normal operating conditions at the Premises boundary and at the location of the	Noise monitoring to be completed within one month of the licence being granted and report to be provided to the CEO within one month of the monitoring being completed.

	Column 1	Column 2
	Requirement	**Date of completion**
	nearest noise sensitive receptors. A report on the noise monitoring shall be prepared in accordance with Part 3 of the *Environmental Protection (Noise) Regulations 1997 (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 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.	

Record-keeping

25. 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 2 of this Licence;

(c) monitoring undertaken in accordance with Condition 24 of this Licence;

(d) complaints received under Condition 26 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 3 years from the date the Books were made; and

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

26. 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.

27. If an Emission that is not a General Emission occurs on the Premises, then the Licence Holder must:

(a) investigate why the Emission occurred;

(b) take all reasonable steps to prevent the Emission occurring again;

(c) record the details of the investigation and all steps taken; and

(d) provide a copy of the record to the CEO within 21 days of the date the Licence Holder became aware of the Emission occurring.

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

29. 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.

Emissions

30. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for specified Emissions and general Emissions described in Column 1 of Table 7 subject to the exclusions, limitations or requirements specified in Column 2 of Table 7.

Table 7: Authorised Emissions table

Column 1	**Column 2**
Emission type	**Exclusions/Limitations/Requirements**
Specified Emissions	
Dust emissions	Subject to compliance with Conditions 2, 3, 4 to 18 and 21
Noise emissions	Subject to compliance with Conditions 2, 21, 22 and 24
General Emissions (excluding Specified 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

Column 1	Column 2
Emission type	**Exclusions/Limitations/Requirements**
	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*.

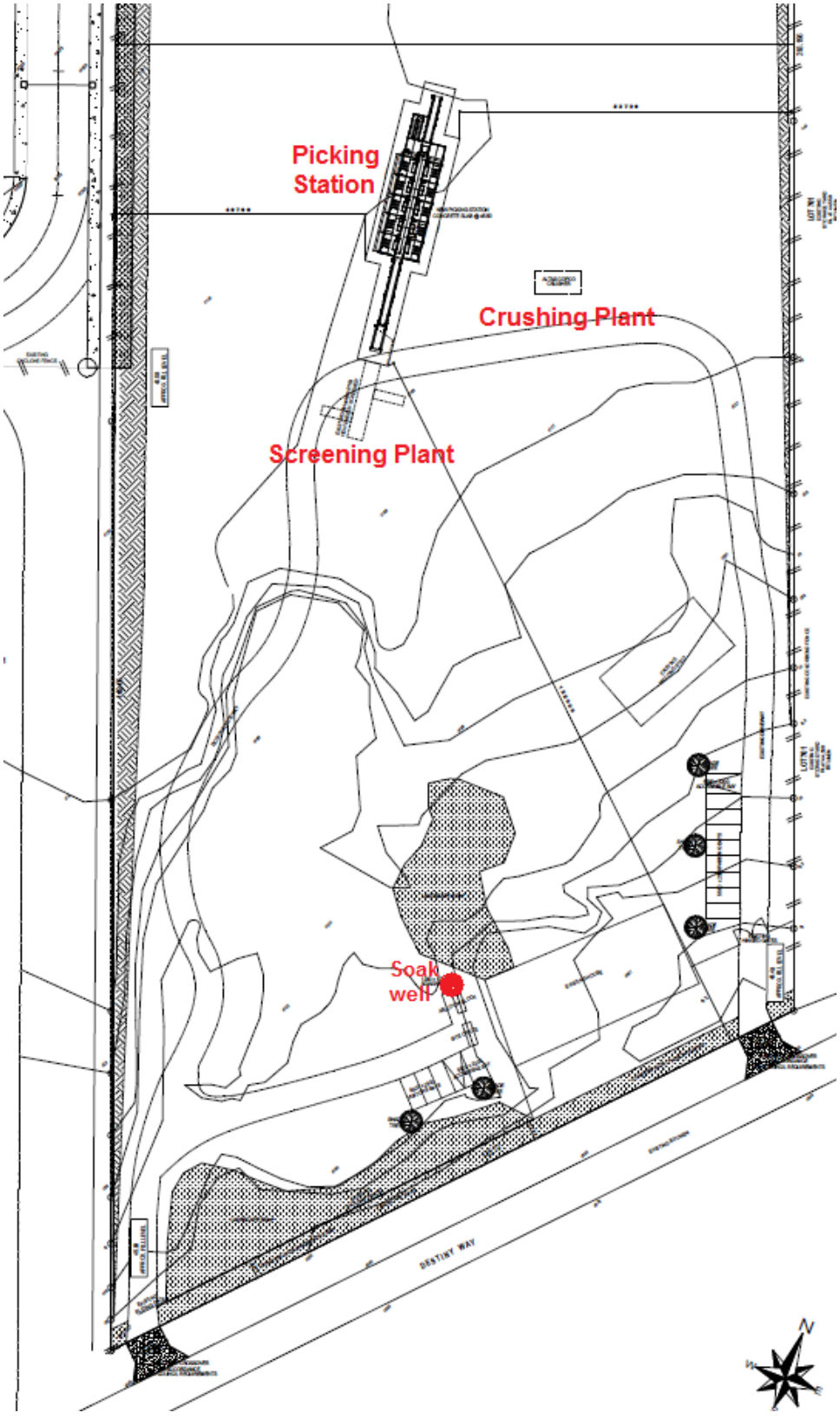
Schedule 1: Maps

Premises map

The Premises boundary is shown as the pink line in the map below.

Premises overview

The Premises infrastructure is shown in the map below.



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 5:

Table 2: 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.*	*Combined limit of 100,000 tonnes per annual period*
Category 61A: solid waste facility. *Premises (other than premises within Category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharges onto land.*	

Infrastructure and equipment

The Primary Activity infrastructure and equipment situated on the Premises is listed in Table 6 and is set out on the Premises in accordance with the site layout specified on the Premises map in Schedule 1.

Table 3: Infrastructure and equipment

Infrastructure and equipment	Plan reference
Hardstand	N/A
2011 Atlas Copco PC3 Impact Crusher	Premises Overview: Crushing plant
McCloskey R105 Screener	Premises Overview: Screening plant
Picking Station	Premises Overview: Picking station
Soak well	Premises Overview: Soak well
Water sprays/sprinklers on crushing plant	N/A
Water sprays/sprinklers on screening plant	N/A
Water sprays/sprinklers on picking station	N/A
Hose/sprinkler systems	N/A
Front end loader(s)	N/A

Attachment 1: Section of 3.3 of the DER Asbestos Guidelines (pages 10 and11)

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;

- 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

Attachment 2: Section of 3.4 of the DER Asbestos Guidelines (pages 11 and 12)

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 confims 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 of 4 of the DER Asbestos Guidelines (pages 15 - 20)

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

Decision Report

Application for Licence

Division 3, Part V *Environmental Protection Act 1986*

Licence Number	L9098/2017/1
Applicant	Delstrat Pty Ltd
ACN	009 433 658
File Number	DER2017/000386
Premises	Delstrat 19 Destiny Way WANGARA WA 6065 Lot 4 on Diagram 30763 Certificate of Title Volume 329 Folio 117A
Date of Report	10 May 2018
Status of Report	Final

Table of Contents

1. Definitions of terms and acronyms

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

Table 1: Definitions

Term	Definition
ACM	Asbestos Containing Material
ACN	Australian Company Number
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).
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
Clean fill	has the meaning defined in Landfill Definitions
Construction and demolition waste	has the meaning defined in Landfill Definitions
Decision Report	refers to this document.
Delegated Officer	an officer under section 20 of the EP Act.
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.
DWER	Department of Water and Environmental Regulation As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the *Public Sector Management Act 1994* and is responsible for the administration of the *Environmental Protection Act 1986* along with other legislation.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Inert Waste Type 1	has the meaning defined in Landfill Definitions

Landfill Definitions	means the document titled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer of the Department of Environment as amended from time to time.
Licence Holder	Delstrat Pty Ltd
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report
Primary Activities	as defined in Schedule 2 of the Revised Licence
Risk Event	As described in *Guidance Statement: Risk Assessment*

2. Purpose and scope of assessment

An Application for a Licence (Application) was received from Delstrat Pty Ltd to operate a crushing/screening and solid waste facility on Destiny Way in Wangara (the Premises). The Premises has been constructed without approval under the *Environmental Protection Act 1986.*

This Decision Report assesses the potential risks to the environment and public health from emissions and discharges during the operation of the Premises. As a result of this assessment, the Delegated Officer intends to grant Licence L9098/2017/1 subject to evidence of relevant planning approval.

2.1 Applicable regulations, standards and guidelines

The overarching legislative framework of this assessment is the EP Act and EP Regulations.

The guidance statements which inform this assessment are:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Publication of Annual Audit Compliance Reports (May 2016)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessments (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Other applicable subsidiary legislation includes:

- *Environmental Protection (Noise) Regulations 1997*
- *Environmental Protection (Unauthorised Discharges) Regulations 2004*

2.2 Information Received

The Application was received on 10 March 2017 from the Applicant for Prescribed Premises categories 12, 13, 61A and 62. The Delegated Officer considered that further information was required to validate the application. This was provided to DWER on 30 May 2017 and 8 August 2017.

Following a review of the additional information provided, the Delegated Officer considered that sufficient information had been provided to validate the application and commence with the risk assessment. As part of the initial review of the information, the Delegated officer considered that only prescribed premises categories 13 and 61A were applicable to the premises activities.

An invoice was sent to the Applicant on 10 October 2017 with payment received on 17 October 2017.

Table 2 lists the prescribed premises categories that are applicable to the Application.

Table 2: Prescribed Premises Categories

Classification of Premises	Description	*Approved Premises production or design capacity or throughput*
Category 13	Crushing of building material: premises on which waste building or demolition material (for example, bricks, stones or concrete) is crushed or cleaned.	Combined total of 100,000 tonnes per annual period
Category 61A	Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	

Table 3 lists the documents submitted during the assessment process.

Table 3: Documents and information submitted during the assessment process

Document/information description	Date received
Application Form	10 March 2017
Attachment 1A: Certificate of Title	
Attachment 1B: ASIC company extract	
Attachment 2A: Map of proposed premises	
Attachment 2B: Site overview map	
Attachment 4: Planning approval	
Attachment 7: Siting and Location	
Attachment 9: Seacrest Homes Licence Application for a Screening and Crushing Facility at 19 Destiny Way, Wangara, prepared by Bowman & Associates Pty Ltd	
Attachment 10: Proposed fee calculation	
Letter from Metaxas & Hager Lawyers	24 July 2017
Company extract for Destiny and Gnangara Pty Ltd	8 August 2017
ABN overview for Seacrest Homes	
Updated Application Form	21 November 2017
Evidence of legal tenure	
Evidence of planning approval	2 May 2018

2.3 Stakeholder Consultation

The application was advertised for public comment on DWER's website and in *The West Australian* on 30 October 2017. No submissions were received from the public.

The Application was referred to the City of Wanneroo (the City) on 17 October 2017. Comments received from the City are detailed below in section 3.3.

3. Regulatory Context

3.1 Approvals: Part V of the EP Act

The Premises was constructed without authorisation under section 52 or 53 of the EP Act. Works approvals are unable to be granted retrospectively and therefore the Applicant has only applied for a Licence in accordance with section 57 of the EP Act.

3.2 Occupancy

The Premises is owned by Destiny & Gnangara Pty Ltd (D&G). D&G share the same directors as Delstrat Pty Ltd (Delstrat). D&G have granted written consent to Delstrat to occupy the Premises.

The Delegated Officer considers that Delstrat has control of the Premises and is therefore considered as the legal occupier of the site.

3.3 Development Approval Relevant to Application

In June 2014 the City of Wanneroo (the City) approved an Application for Planning Approval (PA) to retrospectively change the land use to 'Salvage Yard' with incidental Transport Deport at the Premises, in accordance with the City's *District Planning Scheme No. 2* (DPS2) and the *Metropolitan Region Scheme* (MRS).

Using the City's publically available IntraMaps software, the premises is located within an area zoned as Industrial under the MRS and General Industrial under DPS2. The Delegated Officer considers the proposed activities of crushing, screening, sorting and storing as 'general industry'. As specified in Table 1 (the Zoning Table) of DPS2, a 'general industry' activity is a permitted use within the General Industrial zoning.

A request was sent to the City on 17 October 2017 seeking clarification on whether the Premises had sufficient planning approval for the proposed activities. On 25 October 2017, the City advised DWER that "the proposed licence does not meet what was approved on site."

A letter dated 2 November 2017 was sent to the Applicant advising that advice received from the City indicated that the Premises did not have relevant planning approval for the proposed activities, and requested that evidence of planning approval was required and in the event that planning approval was not provided, DWER would decline to make a regulatory determination on the application.

On 2 May 2018 the Applicant provided the Department with evidence of valid planning approval.

4. Overview of Premises

4.1 Operational aspects

The Application proposes to crush, screen, sort and store up to 100,000 tonnes per year of Clean Fill and Type 1 Inert waste sourced solely from Seacrest Homes (Seacrest) construction sites. Seacrest is a trading name of the Applicant.

The crushed and screened product is either re-used at the Premises for infilling activities or re-used at other Seacrest/Delstrat sites, namely for raising the level of land at these sites. No third party material is received.

The Delegated Officer considers that the infilling activities do not constitute landfilling as the material is sourced, processed and retained at all times by the Applicant.

The Applicant proposes to operate the crusher between the hours of 7am to 4pm Monday to Friday with the premises closed on weekends and Public Holidays. The premises will be enclosed with fencing and lockable gates.

The Premises consists of a screening plant, picking station and crushing plant, all located in the middle of the premises however it is closer to the north-western portion of the site. Site offices and amenity buildings are located in the south-eastern portion of the Premises.

The crushing and screening plants operate on an ad-hoc basis and process approximately 650 tonnes of material per day when in operation. The crushing and screening plants each have a capacity of approximately 80 tonnes per hour.

4.2 Infrastructure

The Applicant's infrastructure, as it relates to Category 13 and 61A activities, is detailed in Table 4 and with reference to the Site Plan in the proposed licence.

Table 4 lists infrastructure associated with each prescribed premises category.

Table 2: Delstrat facility Categories 13 and 61A infrastructure

	Infrastructure	Specifications
Prescribed Activity Categories 13 and 61A		
1	Crushing plant	• 2011 Atlas Copco PC3 Impact Crusher; • Fitted with water sprays; • 80 tonne/hour capacity.
2	Screening plant	• McCloskey R105 Screener • Fitted with water sprays; • 80 tonne/hour capacity.
3	Picking station	• Fitted with water sprays
4	Hardstand	Minimum 200mm crushed road base hardstand covering the whole of the operational and storage areas.
5	Hose/sprinkler system	N/A
6	Front end loader	N/A

4.3 Exclusions to the Premises

Receival and filling of third party material at the premises has not been assessed. The acceptance and burial of this material will require an additional assessment which may result in additional licensing requirements and landfill levy obligations.

5. Modelling and monitoring data

5.1 Monitoring of noise emissions

The document *Acoustic Assessment 1602024 C & D Waste Recycling Facility Lot 4, 19 Destiny Way, Wangara, WA 6056,* 3 March 2017, prepared by ND Engineering Consulting Engineers (Acoustic Assessment) was provided as part of the Application.

Key findings:

1. The Acoustic Assessment summarises that the operations will be compliant with the day-time noise levels assigned under the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations), for residences located to the east and south-west of the Premises.
2. No recommendations were proposed for additional noise mitigation measures.
3. The Delegated Officer notes that residences are also located approximately 500m north-west of the Premises which have not been discussed in the Acoustic Assessment.
4. No monitoring of noise emissions has been undertaken.

6. Location and siting

6.1 Siting context

The Premises is situated within a general industrial area of Wangara surrounded by offices and light to general industry. The suburb of Lansdale is located in close proximity to the Premises. Specific human and environmental receptors are detailed in the following sections.

6.2 Human receptors

The distances to residential and other human receptors are detailed in Table 5.

Table 5: Receptors and distance from activity boundary

Sensitive Land Uses	Distance from Prescribed Activity
Residential Premises	Closest residential premises is located approximately 250m south-east of the Premises boundary.
Public Open Space	Warradale Park is located 700m south-east of the Premises boundary.
Offices	The closest offices are located adjacent to the east and west of the Premises.

6.3 Specified ecosystems

Specified ecosystems are areas of high conservation value and special significance that may be impacted as a result of activities at or Emissions and Discharges from the Premises. The distances to specified ecosystems are shown in Table 6. Table 6 also identifies the distances to other relevant ecosystem values which do not fit the definition of a specified ecosystem.

The table has also been modified to align with the *Guidance Statement: Environmental Siting.*

Table 6: Environmental values

Specified ecosystems	Distance from the Premises
Bush Forever areas	The closest Bush Forever area is located approximately 300m to the Premises' northern boundary

6.4 Groundwater and surface water sources

The distances to groundwater and surface water sources are shown in Table 7.

Table 7: Groundwater and water sources

Groundwater and water sources	Distance from Premises	Environmental value
Public Drinking Water Source Areas (PDWSA) Priority 1	1.3km east of Premises boundary. The nearest production bore located within this PDWSA is located 2.26km from the Premises boundary.	Protected public drinking water area.
Public Drinking Water Source Areas (PDWSA) Priority 3	1.3km east of Premises boundary	Protected public drinking water area.
Groundwater	As identified using DWER's Perth Groundwater Map (PGM), depth to groundwater is located at approximately 1m bgl. PGM indicates that the inferred regional groundwater flow is to the south-west. The nearest bore is located adjacent to the southern boundary within the Premises (based on available GIS dataset –WIN Groundwater Sites).	Groundwater is considered to be fresh (Total dissolved solids 250-500 mg/L).
Gnangara Lake	Located 930 m north-east from the Premises boundary	These lakes support a range of flora and fauna as well as providing aesthetic enjoyment.
Badgerup Lake	Located 1.14 km north-west of the Premises boundary	
Lake Goollelal	Located 3.8 km south-west of the Premises boundary	
Jandabup Lake	Located 4.8km north of the Premises boundary	

6.5 Soil type

PGM describes the surface geology as "swamp and lacustrine deposits - peat, peaty sand and clay". The Department's GIS mapping software identified the soil type as Cb39 which is described as "Subdued dune-swale terrain: chief soils are leached sands" (Gnangara Sustainability Strategy – Situation Paper, January 2009). The Delegated Officer considers that this surface geology has a higher permeability.

6.6 Meteorology

6.6.1 Wind direction and strength

The following wind roses (Figure 1) provides the annual wind direction and strength (km/h) for the periods 9am and 3pm between the years 1988 to 2010 (most recent data available). The Bureau of Meteorology (BoM) provides the 9am and 3pm wind speed and direction for the Perth Metro WA station (station number 009225).

The region has a dominant annual wind direction consisting of easterly and north-easterly winds during morning and south westerly winds in the afternoon. Any air emissions from the premises will impact industrial receptors in the vicinity of the site, and potentially residential areas to the north, east and west. It is important to note that these wind roses shows historical wind speed and wind direction data for the Perth Metro area and should not be used to predict future data.

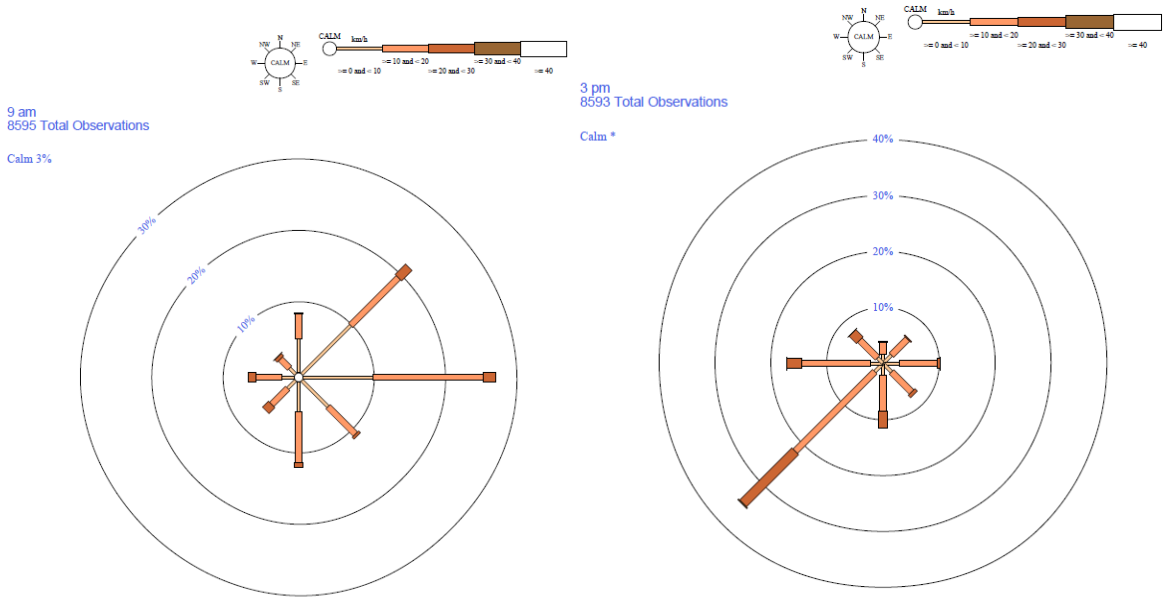


Figure 1: Wind rose for Perth Metro WA at 9am and 3pm (1988 – 2010)

7. Risk assessment

7.1 Determination of emission, pathway and receptor

In undertaking its risk assessment, DWER will identify all potential emissions pathways and potential receptors to establish whether there is a Risk Event which requires detailed risk assessment.

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission. Where there is no actual or likely pathway and/or no receptor, the emission will be screened out and will not be considered as a Risk Event. In addition, where an emission has an actual or likely pathway and a receptor which may be adversely impacted, but that emission is regulated through other mechanisms such as Part IV of the EP Act, that emission will not be risk assessed further and will be screened out through Table 8.

The identification of the sources, pathways and receptors to determine Risk Events are set out in Table 8 below.

Table 8: Identification of emissions, pathway and receptors during operation

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
Waste acceptance, handling and storage ***Processing of waste***	*Storing, sorting, screening and crushing of waste*	*Dust*	*Closest residential premises are located 250m from Premises boundary*	*Air / wind dispersion*	*Impacts to amenity, health and wellbeing*	*Yes*	*Please refer to risk assessment in Section 7.3*
			Bush Forever areas located 300m from Premises northern boundary		*Potential suppression of photosynthetic functions*		
			Gnangara Lake located 930m from Premises		*Contamination of surface water*	*Yes*	
			Badgerup Lake located 1.14km from Premises			*No*	*Receptor is located a significant distance from Premises and is not located within the direction of the prevailing wind*
			Lake Goollelal located 3.8km from Premises			*No*	*Receptor is located a significant distance from Premises*

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		**Potential emissions**	**Potential receptors**	**Potential pathway**	**Potential adverse impacts**		
Waste acceptance, handling and storage ***Processing of waste***	*Storing, sorting, screening and crushing of waste*	*Dust*	*Jandabup Lake located 4.8km from Premises*	*Air / wind dispersion*	*Contamination of surface water*	*No*	*Receptor is located a significant distance from Premises*
		Asbestos	*Closest residential premises are located 250m from Premises boundary*	*Air / wind dispersion*	*Impacts to health*	*Yes*	*Please refer to risk assessment in Section 7.4*
		Windblown waste	*Bush Forever areas located 300m from Premises northern boundary*	*Air / wind dispersion*	*Contamination to land and flora*	*Yes*	*Please refer to risk assessment in Section 7.5*
		Noise	*Closest residential premises are located 250m from Premises boundary*	*Direct discharge*	*Impacts to amenity, health and wellbeing*	*Yes*	*Please refer to risk assessment in Section 7.6*
		Leachate	*Groundwater located 1m bgl*	*Seepage through hardstands* *Overland run-off and storm water drainage system*	*Contamination of groundwater supply for nearby users*	*Yes*	*Please refer to risk assessment in Section 7.7*
			PDWSA: Priority 1 and 3 located 1.3km from Premises	*Transport through groundwater*	*Groundwater contamination*	*Yes*	
			Gnangara Lake located 930m from Premises	*Overland run-off and storm water drainage system* *Transport through groundwater*	*Contamination of surface waters*	*No*	*Receptors are located a significant distance and up-hydraulic gradient of the Premises*
			Badgerup Lake located 1.14km from Premises				
			Lake Goollelal located 3.8km from Premises				

Risk Events						Continue to detailed risk assessment	Reasoning
Sources/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
			Jandabup Lake located 4.8km from Premises				
		Odour	*Closest residential premises are located 250m from Premises boundary*	*Air / wind dispersion*	*Impacts to amenity, health and wellbeing*	*No*	*Applicant proposes to only accept Clean Fill and Type 1 Inert Waste which by nature generates little to no odour emissions.*

7.2 Consequence and likelihood of risk events

A risk rating will be determined for risk events in accordance with the risk rating matrix set out in Table 9 below.

Table 9: Risk rating matrix

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

DWER will undertake an assessment of the consequence and likelihood of the Risk Event in accordance with Table 10 below.

Table 3: Risk criteria table

Likelihood		**Consequence**		
The following criteria has been used to determine the likelihood of the Risk Event occurring.		**The following criteria has been used to determine the consequences of a Risk Event occurring:**		
			Environment	**Public health* and amenity (such as air and water quality, noise, and odour)**
Almost Certain	The risk event is expected to occur in most circumstances	Severe	• **onsite impacts**: catastrophic • **offsite impacts local scale**: high level or above • **offsite impacts wider scale:** mid-level or above • Mid to long-term or permanent impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are significantly exceeded	• Loss of life • **Adverse health effects:** high level or ongoing medical treatment • Specific Consequence Criteria (for public health) are significantly exceeded • **Local scale impacts:** permanent loss of amenity
Likely	The risk event will probably occur in most circumstances	Major	• **onsite impacts**: high level • **offsite impacts local scale**: mid-level • **offsite impacts wider scale**: low level • Short-term impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are exceeded	• **Adverse health effects:** mid-level or frequent medical treatment • Specific Consequence Criteria (for public health) are exceeded • **Local scale impacts**: high level impact to amenity
Possible	The risk event could occur at some time	Moderate	• **onsite impacts**: mid-level • **offsite impacts local scale**: low level • **offsite impacts wider scale**: minimal • Specific Consequence Criteria (for environment) are at risk of not being met	• **Adverse health effects:** low level or occasional medical treatment • Specific Consequence Criteria (for public health) are at risk of not being met • **Local scale impacts:** mid-level impact to amenity
Unlikely	The risk event will probably not occur in most circumstances	Minor	• **onsite impacts**: low level • **offsite impacts local scale**: minimal • **offsite impacts wider scale**: not detectable • Specific Consequence Criteria (for environment) likely to be met	• Specific Consequence Criteria (for public health) are likely to be met • **Local scale impacts:** low level impact to amenity
Rare	The risk event may only occur in exceptional circumstances	Slight	• **onsite impact**: minimal • Specific Consequence Criteria (for environment) met	• **Local scale**: minimal to amenity • Specific Consequence Criteria (for public health) met

^ Determination of areas of high conservation value or special significance should be informed by the *Guidance Statement: Environmental Siting.*
* In applying public health criteria, DWER may have regard to the Department of Health's *Health Risk Assessment (Scoping) Guidelines.*
"onsite**"** means within the Prescribed Premises boundary.

7.3 Risk Assessment – Dust emissions

7.3.1 General hazard characterisation and impact

Dust emissions may be generated from the general handling and loading/unloading of waste, screening and crushing activities. Dust emissions may also arise from vehicle movements.

Dust has the potential to impact public health and affects both the respiratory and cardiovascular systems following both long and short term exposures. Dust may also cause nuisance impacts on the amenity of properties.

Dust impacts to surface water may cause an increase in the suspended solids within the water and impact on the water quality. Dust may also impact on the photosynthetic abilities of flora within Bush Forever areas; however this relationship has not well researched.

7.3.2 Criteria for assessment

The relevant criteria for assessment of dust emissions as PM_{10} is 50µg/m³ over 24 hours as specified in the National Environment Protection (Ambient Air Quality) Measure (NEPM). The NEPM is the relevant criteria for assessment in relation to human health and wellbeing.

Amenity impacts can be also be assessed against the general provisions of the EP Act, specifically whether fugitive dust unreasonably interferes with the health, welfare, convenience, or comfort of any person.

7.3.3 Applicant controls

The Applicant provided the document 'Seacrest Homes Dust Management Plan – 19 Destiny Way, Wangara' (DMP) prepared by Bowman & Associates Pty Ltd, February 2017, as part of the Application.

The main controls proposed in the DMP are set out in Table 11 below which have been reviewed in this assessment.

Table 4: Applicant's proposed controls for dust emissions

Site infrastructure	Description
Waste handling	*Halting unloading/loading activities when strong winds are blowing towards residents.*
	Trucks transporting waste to be covered
	Internal speed limited to a maximum 10 km/hr
	Wetting dry loads as required
	Wetting down trafficable roads as required
Crushing and screening infrastructure	*Use of reticulation and/or water sprays to wet material during processing activities*
	Crusher is fitted with water spray nozzles in the hopper which assist in wetting down material entering the screening plant. *The crusher discharge conveyor can also be covered as required.*
	Halting activities during strong wind conditions

Site infrastructure	Description
	Wetting down processing areas as required
Picking station	*Water sprays fitted to feed conveyor*

7.3.4 Key findings

The Delegated Officer has reviewed the information regarding dust emissions and has found:

1. *Dust emissions may cause impacts to amenity, health and wellbeing to residents located 250m from Premises.*
2. *Dust emissions may impact on flora within the adjacent Bush Forever area and may also cause contamination to surface water within Gnangara Lake.*
3. *The Applicant has provided a DMP which specifies controls for managing dust emissions.*
4. *The Premises has been in operation since at least 2015. No complaints have been received by DWER in regards to dust emissions.*

7.3.5 Consequence

Residential

Based on sensitivity to the nearest residential receptor, the Delegated Officer has determined that residences may experience low-level impacts to health and moderate impacts to amenity. Therefore, the Delegated Officer considers the consequence of dust emission impacts on residences to be **moderate.**

Environmental

Based on sensitivity of the Bush Forever area, the Delegated Officer has determined that flora within the Bush Forever area may experience low-level offsite impacts. Therefore, the Delegated Officer considers the consequence of dust emission impacts on the environmental receptor to be **moderate.**

7.3.6 Likelihood of Risk Event

Residential

Based on the close proximity to residents, the Applicant's proposed controls and history of no dust complaints, the Delegated Officer has determined that the likelihood of moderate dust emissions impacts occurring could occur at some time. Therefore, the Delegated Officer considers the likelihood of moderate dust consequence on residents to be **possible.**

Environmental

Based on the close proximity to the Bush Forever area, which is the closest environmental receptor, and the Applicant's proposed controls, and the location of this receptor not within the direction of the prevailing wind direction, the Delegated Officer has determined that the likelihood of moderate dust emissions occurring could occur at some time. Therefore, the Delegated Officer considers the likelihood of a moderate dust consequence on environmental receptors to be **possible.**

7.3.7 Overall rating of dust emissions

Residential

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 10) and determined that the overall rating for the risk of dust emissions on residential receptors is **medium.**

Environmental

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 10) and determined that the overall rating for the risk of dust emissions on environmental receptors is **medium.**

7.3.8 Regulatory controls for dust emissions

To maintain the medium overall risk rating for dust emissions on both residential and environmental receptors, the Applicant will be required to undertake the following measures:

- Wetting down trafficable roads as required to reduce dust emissions;
- Maintaining and operating water sprays on crushing and screening plants and picking station; and
- Wetting down all loads prior to unloading.

7.4 Risk Assessment – Asbestos

7.4.1 General hazard characterisation and impact

Construction and demolition material may contain Asbestos Containing Material (ACM) which may result in the release of asbestos fibres when ACM is sorted, crushed or screened. The inhalation of asbestos fibres could result in adverse impacts to human health.

7.4.2 Criteria for assessment

Asbestos content in final product is specified in the Department's *Guidelines for Managing Asbestos at Construction and Demolition Waste Recycling Facilities*, December 2012 (Asbestos Guidelines) that any product deemed to contain 0.001% weight for weight must be treated as waste, deemed as potentially contaminated material and considered for off-site disposal, or it should be subject to further actions to remediate it or demonstrate its acceptability by further assessment.

7.4.3 Applicant controls

The Applicant only receives waste from their own construction sites enabling the pre-screening and sorting of waste prior to being received at the Premises. The Premises is not open to the public.

The Applicant has also prided the draft document 'Seacrest Homes Asbestos Management Plan for Crushing & Screening facility at 19 Destiny Way, Wangara' (AMP) prepared by Bowman & Associates, August 2016, which has been considered as part of this assessment.

A summary of the controls proposed in the AMP are outlined in Table 12 below.

Table 12: Applicant's proposed controls for management of asbestos emissions.

Activity	Description
Waste acceptance	*Only receiving waste from Applicant's own sites allowing for pre-sorting of waste prior to being accepted at the Premises.*
	Asbestos is not accepted at the Premises and a 'no asbestos' clause has been included in all waste suppliers (noting only the Applicant's own sites are sources)
	All waste loads containing, or potentially containing asbestos, are recorded in a register.
	Trucks delivering waste to the Premises are inspected by employees prior to and during unloading activities. In the event ACM is identified, the load is wet down and reloaded into the delivery truck for removal offsite.

The controls proposed for management of dust emissions specified in section 7.4 also apply to asbestos management.

7.4.4 Key findings

The Delegated Officer has reviewed the information regarding asbestos emissions and has found:

1. *Asbestos emissions may cause adverse impact to residents located 250m from Premises and employees at adjacent offices and industrial premises.*
2. *The Applicant only accepts waste from their own sites allowing for pre-sorting of waste prior to acceptance at the Premises.*
3. *The Applicant has waste acceptance measures in place to inspect for asbestos with any loads identified as containing asbestos, to be loaded into the delivery site and removed offsite.*

7.4.5 Consequence

Based on sensitivity of human receptors, the Delegated Officer has determined that the impact of asbestos emissions has the potential to result in high level or ongoing medical treatment. Therefore, the Delegated Officer considers the consequence of asbestos emissions to be **severe.**

7.4.6 Likelihood of Risk Event

In considering the Applicant's proposed controls and distance to receptors, the Delegated Officer has determined that the likelihood of severe consequence from asbestos emissions impacting on human health may only occur in exceptional circumstances. Therefore, the Delegated Officer considers the likelihood of asbestos emissions to be **rare.**

7.4.7 Overall rating of asbestos emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 10) and determined that the overall rating for the risk of asbestos emissions is **high.**

7.4.8 Regulatory controls for asbestos emissions

Given the high risk of asbestos emissions, the Delegated Officer considers that the following controls are required:

- Prohibiting the acceptance of asbestos at the Premises;
- Segregating and removing any asbestos from the site in the event it is received in the waste stream;
- Testing and reporting requirements for asbestos content in stockpiles

7.5 Risk Assessment – Windblown waste

7.5.1 General hazard characterisation and impact

Windblown waste from the Premises, such as cardboard and plastic, may generate offsite litter if it leaves the Premises boundary. Litter may cause contamination of surrounding land and surface water.

7.5.2 Criteria for assessment

Although there is no specific criterion for windblown waste, littering is regulated under the *Litter Act 1979* (Litter Act).

7.5.3 Applicant controls

The Applicant proposes to use the existing fences to contain windblown waste within the Premises boundary. Site employees undertake inspections for litter around the fence line, access points and soak wells/drains and remove any litter if identified. The Applicant requires that trucks leaving the Premises are inspected prior to leaving the site to confirm that no windblown waste is attached to the vehicle. All delivery vehicles will be covered.

7.5.4 Key findings

The Delegated Officer has reviewed the information regarding windblown and has found:

1. *Windblown waste/litter may be generated from the storage of cardboard and plastics.*
2. *Litter can cause contamination to the Bush Forever area adjacent to the Premises.*
3. *Litter is regulated under the provisions of the Litter Act.*

7.5.5 Consequence

Based on sensitivity of the Bush Forever area and the nature of the waste, the Delegated Officer has determined that any impacts from windblown waste will be minimal. Therefore, the Delegated Officer considers the consequence of windblown waste on the Bush Forever area to be **minor.**

7.5.6 Likelihood of Risk Event

In considering the Applicant's proposed controls and distance to the receptor, the Delegated Officer has determined that the likelihood of windblown impacting on the Bush Forever area could occur at some time. Therefore, the Delegated Officer considers the likelihood windblown waste to be **possible.**

7.5.7 Overall rating of windblown waste

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 10) and determined that the overall rating for the risk of windblown waste is **medium.**

7.5.8 Regulatory controls for windblown waste

Given the medium risk of litter emissions in regards to use of proponent controls, the Delegated Officer considers that regulatory controls will be included to mirror the proposed mitigation measures for litter/windblown waste.

7.6 Risk Assessment – Noise emissions

7.6.1 General hazard characterisation and impact

Noise emissions may be generated from the general handling and loading/unloading of waste, screening and crushing activities. Noise from vehicles can include reversing beepers. Reversing alarms can carry long distances and may result in the amenity of residential receptors being impacted.

The Applicant has proposed to operate the crusher between 0700 to 1800 hours Monday to Friday with the facility closed on weekends and public holidays.

7.6.2 Criteria for assessment

The *Environmental Protection (Noise) Regulations 1997* (Noise Regulations) specify the maximum assigned noise levels authorised to be emitted from a premises in relation to the receiving receptors and siting.

The Delegated Officer considers that the residential receptors within the vicinity of the Premises are considered as a 'noise sensitive premises' being *a premises occupied solely or mainly for residential or accommodation purposes* as specified in Schedule 1, Part C of the Noise Regulations.

In The Noise Regulations L_{A10} assigned levels for a 'noise sensitive premises: highly sensitive areas are as follows:

- 0700 to 1900 hours Monday to Saturday (referred to as day-time hours): 45 dB + influencing factor;
- 0900 to 1900 hours Sunday and public holidays: 40 dB + influencing factor;
- 1900 to 2200 hours all days: 40 dB + influencing factor; and
- 2200 to 0700 hours Monday to Saturday and 0900 hours Sunday and public holidays: 35 dB + influencing factor.

Operations between 0700 to 1900 Monday to Saturday are considered to be 'day time' hours.

7.6.3 Applicant controls

As discussed in section 5.1, the Acoustic Assessment was provided as part of the Application. The Acoustic Assessment states that the facility:

> *"will comply with the Environmental Protection (Noise) Regulations 1997 from Monday to Friday from 0700 to 1900 hours… for the nearby residential areas to the East and South West based on the current usage and equipment."*

The Applicant provided the document 'Seacrest Homes Noise Management Plan – 19 Destiny Way, Wangara' (NMP) prepared by Bowman & Associates, March 2017, as part of the Application.

The NMP proposes the following noise mitigation to be implemented at the Premises:

- Use of stockpiled materials (processed and unprocessed) situated around the crushing and screening plants to provide a noise attenuate barrier; and
- Maintaining internal speed limits (10 km/hr).

7.6.4 Key findings

The Delegated Officer has reviewed the information regarding noise emissions and has found:

1. *Noise emissions from site activities may impacts on the health, amenity and wellbeing of residents located 250m from Premises and on offices and other industrial premises located adjacent to the Premises.*
2. *Noise monitoring has not been undertaken for the Premises.*
3. *Crushing and screening operations are proposed by the Applicant to be limited to 'day time' hours.*
4. *The acoustic assessment undertaken for the Premises suggests that emissions can comply with the assigned levels in the Noise Regulations.*
5. *No noise complaints have been received by DWER in regards to the Premises operations which have been ongoing for more than 12 months.*

7.6.5 Consequence

Based on sensitivity to the nearest residential receptor, the Delegated Officer has determined that residents may experience low-level impact to health and amenity. Therefore, the Delegated Officer considers the consequence of dust emission impacts on residences to be **minor.**

7.6.6 Likelihood of Risk Event

In considering the Applicant's proposed controls, proximity to residences, and the operating history without receiving noise complaints, the Delegated Officer has determined that the likelihood of minor noise emissions impacting on amenity and health will probably occur in most circumstances. Therefore, the Delegated Officer considers the likelihood of noise emissions to be **likely.**

7.6.7 Overall rating of noise emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 10) and determined that the overall rating for the risk of noise emissions is **medium.**

7.6.8 Regulatory controls for noise emissions

A regulatory control will be placed on the licence restricting the crusher operations to day time hours only. This mirrors the Applicant's proposed control.

A condition will also be included to require noise monitoring to be undertaken and assessed against the Noise Regulations. In the event that site operations do not comply with the Noise Regulations, the Applicant will be required to provide noise mitigation measures to become compliant and a timeframe for these to be implemented.

7.7 Risk Assessment – Leachate emissions

7.7.1 General hazard characterisation and impact

Leachate may be generated when stormwater mixes with stored waste, including stockpiling/storage of non-conforming waste. Leachate may infiltrate through soil into groundwater or flow over land into surface water systems. The soil type at the Premises is considered to be permeable creating a potential pathway for leachate to enter groundwater.

Depth to groundwater is 1 mbgl at the Premises and is considered to be fresh. Leachate may impact on groundwater quality and contaminate the water supply for groundwater users.

7.7.2 Criteria for assessment

The ANZECC & ARMCANZ (2000) Australian Water Quality Guidelines for Fresh and Marine Water Quality (ANZECC) guidelines are the most appropriate assessment criteria to assess the potential impact on groundwater and surface water. In the absence of trigger levels in the ANZECC guidelines, the DoH (2014) *Contaminated sites ground and surface water chemical screening guidelines* may also be considered.

7.7.3 Applicant controls

The Applicant has proposed to only accept clean fill and Type 1 Inert waste which generally poses little to no risk of leaching contaminants. Non-conforming wastes such as wood, cardboards and plastics, will be removed and separated from the inert waste stream.

7.7.4 Key findings

The Delegated Officer has reviewed the information regarding leachate emissions and has found:

4. *Materials stored and processed at the premises are inert in nature and pose low risk to the environment.*
5. *Waste brought onto Premises is from Applicant's own sites allowing for pre-sorting activities to remove non-conforming wastes before being accepted onsite.*
6. *No specific stormwater controls have been proposed by the Applicant.*
7. *Depth to groundwater is located 1 mbgl at the Premises.*

7.7.5 Consequence

Based on sensitivity to groundwater and the inert nature of the waste proposed for acceptance at the site, the Delegated Officer has determined that any onsite impacts will be low level. Therefore, the Delegated Officer considers the consequence of leachate impacts to groundwater to be **minor.**

7.7.6 Likelihood of Risk Event

In considering the Applicant's proposed controls and depth to groundwater, the Delegated Officer has determined that the likelihood of minor leachate emissions impacting on groundwater will probably occur in most circumstances. Therefore, the Delegated Officer considers the likelihood of low level leachate emissions to be **likely.**

7.7.7 Overall rating of leachate emissions

The Delegated Officer has compared the consequence and likelihood ratings described above with the risk rating matrix (Table 10) and determined that the overall rating for the risk of leachate emissions is **medium.**

7.7.8 Regulatory controls for leachate emissions

Regulatory controls for waste acceptance, such as the requirement to only accept inert material and removal of non-conforming waste will assist in maintaining the medium risk level posed by leachate emissions.

7.8 Acceptability and treatment of Risk Event

DWER will determine the acceptability and treatment of Risk Events in accordance with the Risk treatment table 13 below:

Table 5: Risk treatment table

Rating of Risk Event	Acceptability	Treatment
Extreme	Unacceptable.	Risk Event will not be tolerated. DWER may refuse application.
High	May be acceptable. Subject to multiple regulatory controls.	Risk Event may be tolerated and may be subject to multiple regulatory controls. This may include both outcome-based and management conditions.
Medium	Acceptable, generally subject to regulatory controls.	Risk Event is tolerable and is likely to be subject to some regulatory controls. A preference for outcome-based conditions where practical and appropriate will be applied.
Low	Acceptable, generally not controlled.	Risk Event is acceptable and will generally not be subject to regulatory controls.

7.9 Summary of acceptability and treatment of Risk Events

A summary of the risk assessment and the acceptability or unacceptability of the risk events set out above, with the appropriate treatment and control, are set out in Table 14 below.

Table 6: Risk assessment summary

	Description of Risk Event			Applicant controls	Risk rating	Acceptability with controls (conditions on instrument)
	Emission	**Source**	**Pathway/ Receptor (Impact)**			
1A.	Dust emissions	General waste handling and storage Crushing and screening activities Vehicle and stockpile lift-off	Air/wind to sensitive residential receptor causing impacts to amenity and health.	Halting dust generating activities when wind is towards sensitive receptors, wetting loads and processing areas as required, water sprays on crusher and picking station, reducing internal speed limits.	Moderate consequence Possible likelihood **Medium Risk**	Acceptable subject to proponent controls conditioned / outcomes based controls
1B.	Dust emissions	General waste handling and storage Crushing and screening activities Vehicle and stockpile lift-off	Air/wind to Bush Forever area causing health impacts to the respiratory and photosynthetic abilities of flora.	Halting dust generating activities when wind is towards sensitive receptors, wetting loads and processing areas as required, water sprays on crusher and picking station, reducing internal speed limits.	Moderate consequence Possible likelihood **Medium Risk**	Acceptable subject to proponent controls conditioned / outcomes based controls
2.	Asbestos emissions	General waste handling and storage Crushing and screening activities Vehicle and stockpile lift-off	Air/wind to sensitive residential receptor causing impacts to health.	Acceptance from occupier source sites only, asbestos not to be accepted on site, visual inspection of wastes received. Controls specified for 1A and 1Balso apply.	Severe consequence Rare likelihood **High risk**	Acceptable subject to multiple regulatory controls
3.	Windblown waste	General waste handling and storage	Air/wind to sensitive receptor	Fencing around Premises, visual inspections, removal of windblown waste from fences, access points and soak wells when identified.	Minor consequence Possible likelihood **Medium Risk**	Acceptable subject to proponent controls conditioned / outcomes based controls

	Description of Risk Event			Applicant controls	Risk rating	Acceptability with controls (conditions on instrument)
	Emission	**Source**	**Pathway/ Receptor (Impact)**			
4.	Noise emissions	General waste handling and storage Crushing and screening activities Vehicle movement	Air/wind to sensitive receptor	Stockpiling processed and unprocessed material around crushing/screening plants, maintaining low internal speed limits.	Minor consequence Likely likelihood **Medium Risk**	Acceptable subject to proponent controls conditioned / outcomes based controls
5.	Leachate emissions	Handling and storage of waste	Seepage through hardstands Overland runoff Migration through groundwater	Acceptance of clean fill and inert wastes only, non-conforming wastes to be removed from site.	Minor consequence Likely likelihood **Medium risk**	Acceptable subject to proponent controls conditioned / outcomes based controls

8. Regulatory controls

A summary of regulatory controls determined to be appropriate for the Risk Event is set out in Table 15. The risks ad controls are set out in the assessment in sections 7.3 to 7.7 with an overview provided in this section. DWER will determine controls having regard to the adequacy of controls proposed by the Applicant. The conditions of the Licence will be set to give effect to the determined regulatory controls.

Table 7: Summary of regulatory controls to be applied

		Controls (references are to sections below, setting out details of controls)				
		10.1.1 Infrastructure and equipment	10.1.2 Operational controls	10.1.4 Specified action	10.1.5 Monitoring	10.1.6 Reports
Risk Items (see risk analysis in section 7)	1A. Dust emissions on human receptors	●	●			
	1B. Dust emissions on environmental receptors	●	●			
	2. Asbestos on human health	●	●		●	●
	3. Windblown waste on environmental receptors		●			
	4. Noise emissions on human receptors	●	●	●	●	●
	5. Leachate emissions on environmental receptors		●			

9. Determination of Licence conditions

The conditions in the issued Licence have been determined in accordance with the *Guidance Statement: Setting Conditions*.

The *Guidance Statement: Licence Duration* has been applied and the issued licence expires in 20 years from date of issue.

Table 16 provides a summary of the conditions to be applied to this licence.

Table 16: Summary of conditions to be applied

Condition Ref	Grounds
Environmental Compliance Condition 1	Environmental compliance is a valid, risk-based condition to ensure appropriate linkage between the licence and the EP Act.
Infrastructure and Equipment Condition 2	These conditions are valid, risk-based and contain appropriate controls.
Waste Acceptance and Processing Conditions 3 to 20	These conditions are valid, risk-based and consistent with the EP Act.
Specified Actions Condition 24	This condition is valid, risk-based and consistent with the EP Act.
Record-Keeping Conditions 25 to 29	These conditions are valid and are necessary administration and reporting requirements to ensure compliance.
Emissions Condition 30	This condition is valid and is necessary to the administration and reporting requirements to ensure compliance.

DWER notes that it may review the appropriateness and adequacy of controls at any time and that, following a review, DWER may initiate amendments to the licence under the EP Act.

10. Applicant's comments

The Applicant was provided with the draft Decision Report and draft Licence on 8 December 2017. The Applicant provided evidence of planning approval and comments to the Department on 2 May 2018. The Applicant requested that the crusher is authorised to be operated on Saturdays to align with the planning approval requirements. No other changes were proposed. The Delegated Officer has updated the licence to reflect this request.

11. Conclusion

This assessment of the risks of activities on the Premises has been undertaken with due consideration of a number of factors, including the documents and policies specified in this Decision Report (summarised in Appendix 1).

Based on this assessment, it has been determined that the Licence will be granted subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements, and subject to evidence of relevant planning approval.

Signed 8/05/2018

Rebecca Kelly
MANAGER LICENSING – WASTE INDUSTRIES
Delegated Officer
under section 20 of the *Environmental Protection Act 1986*

Appendix 1: Key documents

	Document title	Availability
1.	Licence Application and Attachments 1A, 1B, 2A, 2B, 4, 7, 9 and 10	DWER records (A1393993)
2.	Correspondence from Metaxas & Hager Lawyers	DWER records (A1486609)
3.	Updated Application Form	DWER records (A1570419)
4.	Evidence of Legal Tenure	
5.	DER, July 2015. *Guidance Statement: Regulatory Principles.* Department of Environment Regulation, Perth.	Accessed at www.dwer.wa.gov.au
6.	DER, October 2015. *Guidance Statement: Setting conditions.* Department of Environment Regulation, Perth.	
7.	DER, May 2016. *Guidance Statement: Publication of Annual Audit Compliance Reports.* Department of Environment Regulation, Perth.	
8.	DER, August 2016. *Guidance Statement: Licence duration.* Department of Environment Regulation, Perth.	
9.	DER, November 2016. *Guidance Statement: Environmental Siting.* Department of Environment Regulation, Perth.	
10.	DER, February 2017. *Guidance Statement: Land Use Planning*. Department of Environment Regulation, Perth.	
11.	DER, February 2017. *Guidance Statement: Risk Assessments*. Department of Environment	

	Regulation, Perth.	
12.	DER, February 2017. *Guidance Statement: Decision Making*. Department of Environment Regulation, Perth.	