Licence number L8920/2015/1

Licence holder Sims Group Australia Holdings Limited

ACN 008 634 526

Registered business address Suite 2, Level 9

189 O'Riordan Street

MASCOT NSW 2020

DWER file number DER2015/001987-3

Duration 11 July 2016 to 10 July 2036

Date of amendment 11 June 2020

Premises details Sims Metal Management

14 Donaldson Road, KWINANA BEACH WA 6167

Legal description -

Lot 100 on Deposited Plan 73740

KWINANA WA 6167

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 47: Scrap metal recovery	400,000 tonnes per year

This licence is granted to the licence holder, subject to the attached conditions, on 11 June 2020, by:

Melissa Chamberlain

A/MANAGER – WASTE INDUSTRIES

REGULATORY SERVICES

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

Licence history

Date	Reference number	Summary of changes
W5695/2014/1	27/11/2014	Works Approval issued for the construction of the premises
L8920/2015/1	30/06/2016	New Licence
L8920/2015/1	11/06/2020	Licence Amendment

Interpretation

In this licence:

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

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

Licence conditions

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

Premises access

- **1.** The licence holder must:
 - (a) erect and maintain suitable fencing to prevent unauthorised access to the site;
 - (b) ensure that any entrance gates to the premises are securely locked when the premises is unattended; and
 - (c) undertake regular inspections of all security measures and repair damage as soon as practicable.
- 2. The licence holder shall install and maintain a sign at the entrance to the premises that clearly displays the following information:
 - (a) hours of operation;
 - (b) contact telephone number(s);
 - (c) warning indicating penalties for people lighting fires; and
 - (d) list of prohibited materials not accepted at the premises.

Waste acceptance and processing

3. The licence holder must only accept onto the premises waste of a waste type, which does not exceed the corresponding rate at which waste is received, and which meets the corresponding acceptance specification set out in Table 1.

Table 1: Types of waste authorised to be accepted onto the premises

Waste type	Rate at which waste is received	Acceptance specification ¹
Scrap metal (ferrous and non- ferrous)	400,000 tonnes per annual period	 (a) Uncompacted car bodies (b) Crushed or compacted car bodies (c) Light gauge (mixed) scrap (d) Heavy gauge steel (e) Non-ferrous metals (f) Batteries

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

- 4. The licence holder must 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 must ensure that the waste types specified in Table 2 are only subjected to the corresponding processes, subject to the corresponding process limits and/or specifications.

Table 2: Waste processing

Γable 2: Waste processing		
Waste type	Processes	Process limits and/or specifications
Scrap metal (ferrous and non- ferrous)	Receipt, handling, sorting, baling, shearing, shredding, flame cutting, compacting and storage prior to sale or removal offsite	 Acceptance requirements: Inspection of all materials received at the premises for the removal of non-conforming waste and hazardous waste, including, but not limited to, Liquefied Petroleum Gas, oxygen, acetylene (or any other compressed gas cylinders), chemical, hazardous, flammable or explosive substances. If any of these wastes are found, they are required to be removed before further processing; Any brake pads that are suspected of containing asbestos must be removed prior to further processing; and All items that may have contained gasses must be de-gassed prior to acceptance onto the premises.
		Storage requirements:
		 All waste, excluding heavy gauge steel, to be stored on a hardstand area; Batteries to be stored within in an undercover bunded hardstand area; Stored at least 10 m from the premises boundary unless contained within Barrier Walls; and Floc to be stored undercover within a three walled bay which has been fitted with water spray jets to reduce floc lift-off.
		Processing requirements:
		 Sorting of non-ferrous metals to be undertaken within the non-ferrous area; Car de-pollution activities to be undertaken on a bunded hardstand area prior to baling, shearing, shredding or compaction activities; Waste hydrocarbons, petrol and other chemicals to be contained in an impermeable container for off-site disposal; Operational areas to be maintained free of accumulated stormwater; No hot works to occur within 10 m of floc stockpiles; and
		Any residues from drums or waste received are to be collected and contained in an impervious sealed tank/container, in a manner that prevents mixing of incompatible wastes, prior to disposal off site to a licenced landfill or appropriate facility.

Infrastructure and equipment

6. The licence holder must ensure that the site infrastructure and equipment listed in Table 3 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 3.

Table 3: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Premises roads, pavement, work areas and driveways	Must be swept and wetdown as required to minimize dust emissions.	-
Concrete hardstand area	Must achieve a permeability of less than 1 x 10 ⁻⁹ m/s or equivalent.	All processing areas, except the Medium risk area, as shown in Schedule 1: Maps
Compacted hardstand area	Must be maintained across the medium risk area on the premises. Must be underlain with an impermeable geosynthetic clay liner to prevent stormwater infiltration.	Medium risk areas, as shown in Schedule 1: Maps
Equipment utilised for metal recycling processesing	Must be operated in a manner that ensures related noise emissions comply with the Environmental Protection (Noise) Regulations 1997. Waste stream conveyors must be covered at all times to prevent dust emissions.	-
Shredder	Must have a closed circuit cyclone for floc recovery and be fitted with water spray jets. Must be fitted and operated with an acoustic enclosure at all times. Must be operated in a manner that ensures related noise emissions comply with the Environmental Protection (Noise) Regulations 1997.	High risk area (Catchment C) as shown in Schedule 1: Maps.
Stormwater Containment system – Basin A	Drains and basin to be kept free of waste.	As shown in Schedule 1: Maps
Stormwater Containment System – Basin B	Drains and basin to be kept free of waste.	

Site infrastructure and equipment	Operational requirement	Infrastructure location
Stormwater and Wastewater Containment System - Basin C	Must be used to collect all stormwater and wastewater generated and collected in Catchment C (high and medium risk areas) on the premises.	(continued) As shown in Schedule 1: Maps
Dasiii C	Must be lined with a HDPE impermeable membrane, and achieve a permeability of less than 1 x 10 ⁻⁹ m/s or equivalent.	
	Must be fitted with a Gross Pollutant Trap (GPT) and sediment and oil separator, maintained in accordance with manufacturer's specifications.	
	Prior to discharge into the Basin, wastewater and stormwater must pass through the GPT and sediment and oil separator.	
	Must maintain a freeboard of at least 300mm.	
	Design capacity to contain a '1-in-100' year stormwater event.	
Pump, flow meter and discharge piping network from Basin C to Basin B	Must be maintained in good working order and clear of debris.	As shown in Schedule 1: Maps
All on-site fire management and prevention equipment	All on-site fire management and prevention equipment including, but not limited to: - fire hydrants and hose reels; - mobile water truck; and - Foam station at each hydrant; to be stored so access is not impeded by infrastructure or equipment used in site operations.	-
	All on-site fire management and prevention equipment must be maintained and in good working order at all times.	

Emissions and discharges

Discharges to land

7. The licence holder must ensure that the emissions specified in Table 4, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 4: Authorised discharge points

Emission	Discharge point	Discharge point location
Process stormwater/ wastewater from Basin C	Basin B (via flow meter and piping from Basin C)	As shown in Schedule 1: Discharge Infrastructure map

- **8.** Authorised discharges specified in condition 7 must not commence until the monitoring results required by conditions 19, 20 and 21 are received by the Licence Holder to verify that the requirement of condition 9 is met.
- **9.** The licence holder must ensure that emissions from the discharge point listed in Table 5 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with conditions 19, 20 and 21.

Table 5: Emission and discharge limits

Discharge point	Parameter	Limit
Basin B	рН	6.5-8.0 pH units
(via flow meter and piping from Basin C)	TRH C ₆₋₁₀	1mg/L
piping nom basin c)	TRH C ₁₀₋₁₆	1mg/L
	TRH C ₁₆₋₃₄	1mg/L
	TRH C ₃₄	1mg/L
	Aluminium	0.2mg/L
	Arsenic	0.1mg/L
	Cadmium	0.02mg/L
	Chromium (IV)	0.5mg/L
	Copper	20mg/L
	Manganese	5mg/L
	Nickel	0.2mg/L
	Lead	0.1mg/L
	Zinc	3mg/L
	Benzene	0.01mg/L
	Toluene	0.025mg/L
	Ethylbenzene	0.003mg/L
	Xylenes	0.02mg/L
	Total nitrogen	5mg/L
	Benzo(a)pyrene	0.0001mg/L
	Napthalene	0.000271mg/L

Stormwater management

- 10. The licence holder must take all reasonable and practicable measures to prevent stormwater run-off becoming contaminated by the activities and operations undertaken at the premises by ensuring that:
 - (a) stormwater collected and generated within Catchment A drains to Basin A;
 - (b) stormwater collected and generated within Catchment B drains to Basin B; and
 - (c) stormwater collected and generated within Catchment C is discharged into Basin C.

11. The licence holder must only reuse treated stormwater and wastewater collected in Basin C within the Catchment C area.

Monitoring

- **12.** The licence holder must ensure that:
 - (a) monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters;
 - (b) monitoring is undertaken in each six-monthly period such that there are at least 5 months in between the days on which samples are taken in successive periods of six months; and
 - (c) monitoring is undertaken in each annual period such that there are at least 9 months in between the days on which samples are taken in successive years.

Inputs and outputs

13. The licence holder must record the total amount of waste accepted onto the premises, for each waste type listed in Table 6, in the corresponding unit, and for each corresponding frequency, as set out in Table 6.

Table 6: Waste accepted onto the premises

Waste type	Unit	Frequency
Scrap metal (ferrous and non- ferrous)	tonnes	Each load arriving at the premises

14. The licence holder must record the total amount of waste removed from the premises, for each waste type listed in Table 7, in the corresponding unit, and for each corresponding frequency set out in Table 7.

Table 7: Waste removed from the premises

Waste type	Unit	Frequency
Recyclable shredded metal	Tonnes	Each load leaving the premises
Waste types as defined in the Landfill Definitions	Tonnes	Each load leaving, or rejected from, the premises
Hydrocarbons and hydrocarbon contaminated water (including contaminated sediment), removed from fuel tanks	Litres	Each fuel tank drained
Hydrocarbons and hydrocarbon contaminated water (Including contaminated sediment), removed from the oil and sediment separator	Litres and/or kg	Each time the oil and sediment separator is cleaned out

Noise monitoring

15. The licence holder must conduct a noise monitoring programme in accordance with the requirements specified in Schedule 2 and record the results of all monitoring activity conducted under that programme.

Process stormwater monitoring

- 16. The licence holder must conduct a process stormwater monitoring programme in accordance with the requirements specified in Schedule 3 and record the results of all monitoring activity conducted under that programme.
- 17. The licence holder must adhere to the field quality assurance and quality control procedures specified in Schedule 3 and Schedule 6 for the monitoring required by condition 16.
- 18. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in Schedule 3.

Discharge to land monitoring

- **19.** The licence holder must conduct a discharge to land monitoring programme in accordance with the requirements specified in Schedule 4 and record the results of all monitoring activity conducted under that programme.
- **20.** The licence holder must adhere to the field quality assurance and quality control procedures specified in Schedule 4 and Schedule 6 for the monitoring required by condition 19.

21. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in Schedule 4.

Ambient groundwater monitoring

- 22. The licence holder must conduct a groundwater monitoring programme in accordance with the requirements specified in Schedule 5 and record the results of all monitoring activity conducted under that programme.
- 23. The licence holder must adhere to the field quality assurance and quality control procedures specified in Schedule 5 and Schedule 6 for the monitoring required by condition 22.
- 24. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in Schedule 5.

Records and reporting

- **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) any maintenance of infrastructure that is performed in the course of complying with condition 6 of this licence;
 - (c) monitoring programmes undertaken in accordance with conditions 15, 16, 19 and 22 of this licence; and
 - (d) complaints received under condition 27 of this licence.
- **26.** The books specified under condition 25 must:
 - (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the licence holder for the duration of the licence; and
 - (d) be available to be produced to an inspector or the CEO as required.
- 27. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

Fire and Emergency Reporting

- **28.** The licence holder must immediately notify the CEO of:
 - (a) any fire on the premises; or
 - (b) any accident, malfunction or emergency which could result in the discharge of fire-fighting washwater or other wastes from the premises.

Air Blast Reporting

- **29.** The licence holder must submit to the CEO an Air Blast report;
 - (a) that includes data and information for all air blasts undertaken in each Quarterly period; and
 - (b) within 28 calendar days of each Quarterly period.

Non-compliance Reporting

- **30.** The licence holder must, within 7 days of becoming aware of any non-compliance with condition 3, 5, 6, 7, 8 and 9 of this licence, notify the CEO in writing of that non-compliance and include in that notification the following information:
 - (a) which condition was not complied with;
 - (b) the time and date when the non-compliance occurred;
 - (c) if any environmental impact occurred as a result of the non-compliance and if so what that impact is and where the impact occurred;
 - (d) the details and result of any investigation undertaken into the cause of the noncompliance;
 - (e) what action has been taken and the date on which it was taken to prevent the non-compliance occurring again; and
 - (f) what action will be taken and the date by which it will be taken to prevent the non-compliance occurring again.

Annual Audit Compliance Report

- **31.** The licence holder must:
 - (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - (b) prepare and submit to the CEO by no later than 32 days after the end of that annual period an Annual Audit Compliance Report in the approved form.

Annual Environmental Report

32. The licence holder must submit to the CEO by no later than 32 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 8, and which provides information in accordance with the corresponding requirement set out in Table 8.

Table 8: Annual Environmental Report

Condition	Requirement
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken
30	Summary of non-compliances reported during the annual period
13, 14	Inputs and outputs data
15	Noise monitoring data and data summary
15	Summary of air blast monitoring data where LA Peak has exceeded the assigned noise levels specified in the <i>Environmental Protection (Noise)</i> Regulations 1997
16, 17, 18	Process stormwater monitoring data
19, 20, 21	Discharge to land monitoring results and data, including: - dates of each discharge event; and - total volume (in litres or ML) of each discharge for a discharge event.
22, 23, 24	Ambient groundwater monitoring report
3, 9	Summary of any limit exceeded
27	Complaints summary

- The licence holder must ensure that the process stormwater monitoring, discharge to land monitoring and groundwater monitoring reports submitted in accordance with condition 32 demonstrates compliance with conditions 15,16, 17, 18, 19, 20, 21, 22, 23 and 24 for the preceding annual period, and includes:
 - (a) a clear statement of the scope of work carried out:
 - (b) a description of the field methodologies employed;
 - (c) a summary of the field and laboratory quality assurance / quality control (QA/QC) program;
 - (d) copies of the field monitoring records and field QA/QC documentation;
 - (e) an assessment of reliability of field procedures and laboratory results;
 - (f) a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis;
 - (g) a diagram with aerial image overlay showing all monitoring locations and depicting groundwater level contours, flow direction and hydraulic gradient

- (relevant site features including discharge points and other potential sources of contamination must also be shown);
- (h) an interpretive summary and assessment of the results against relevant assessment levels for water, as published in the Guideline Assessment and management of contaminated sites;
- (i) an interpretive summary and assessment of results against previous monitoring results; and
- (j) trend graphs to provide a graphical representation of historical results and to support the interpretive summary.

Note 1: General guidance on report presentation can be found in the Department's *Guideline: Assessment and management of contaminated sites*.

Definitions

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

Table 9: Definitions

Term	Definition
ACN	Australian Company Number
Air blast	means a noise event resulting from an explosion within the shredder
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
AS/NZS1259.1	Means the Australian Standard AS/NZS 1259.1 (1990) Acoustics – Sound level meters – Non-integrating
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 (R2016) Water quality – sampling – guidance of the design of sampling programs, sampling techniques and the preservation and handling of samples, as amended from time to time
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 (R2016) Water quality – sampling – guidance on sampling of wastewaters, as amended from time to time
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 (R2016) Water quality – sampling – guidance on sampling groundwater, as amended from time to time
Assessment of Site Contamination NEPM	means the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended from time to time
ARI	means average recurrence interval
averaging period	means the time over which a limit is measured or a monitoring result is obtained
Barrier Walls	means the concrete walls supported by steel beams and embedded into the ground.
Basin A	means the infiltration basin marked as Basin A in Schedule 1: Maps
Basin B	means the infiltration basin marked as Basin B in Schedule 1: Maps
Basin C	means the lined stormwater and process water basin marked as Basin C in Schedule 1: Maps

Term	Definition
books	has the same meaning given to that term under the EP Act.
Catchment A	means the area shown as Catchment Area A on the Premises catchment areas map in Schedule 1 of this licence.
Catchment B	means the area shown as Catchment Area B on the Premises catchment areas map in Schedule 1 of this licence.
Catchment C	means the area shown as Catchment Area C on the Premises catchment areas map in Schedule 1 of this licence.
CEO	means Chief Executive Officer of the Department.
	"submit to / notify the CEO" (or similar), means either:
	Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919
	or:
	info@dwer.wa.gov.au
controlled waste	has the definition in the Environmental Protection (Controlled Waste) Regulations 2004
dB	means decibels
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
de-pollution	means the draining of all vehicle fuel tanks prior to shredding and baling
discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environment Regulation
emission	has the same meaning given to that term under the EP Act.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
floc	means the shredder waste residue predominantly consisting of plastic, rubber and foam.
hardstand	means a surface with a permeability of 10 ⁻⁹ metres/second or less
hazardous waste	has the meaning defined the Landfill Definitions

Term	Definition
Hz	means hertz
Landfill Definitions	means Landfill Waste Classification and Waste Definitions 1996, as amended from time to time.
LLiner peak	means the maximum reading in decibels obtained using the "P" time-weighting characteristic as specified in AS 1259.1-1990 with all frequency-weighting networks inoperative and with sound level measuring equipment that complies with the requirements of Schedule 4 of the <i>Environmental Protection (Noise) Regulations</i> 1997.
LA Max slow	means the maximum reading in decibels obtained using the "A" frequency-weighting characteristic and the "S" time-weighting characteristic as specified in the AS 1259.1-1990 with sound level measuring equipment that complies with the requirements of Schedule 4 of the <i>Environmental Protection (Noise) Regulations</i> 1997.
L _{A peak}	means the maximum reading means in decibels obtained using the "A" frequency-weighting characteristic and the "P" time-weighting characteristic as specified in the AS 1259.1-1990 with sound level measuring equipment that complies with the requirements of Schedule 4 of the <i>Environmental Protection (Noise) Regulations</i> 1997.
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
mBGL	means meters below ground level
NATA	means the National Association of Testing Authorities
NATA accredited	means in relation to the analysis of a sample, that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
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.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.

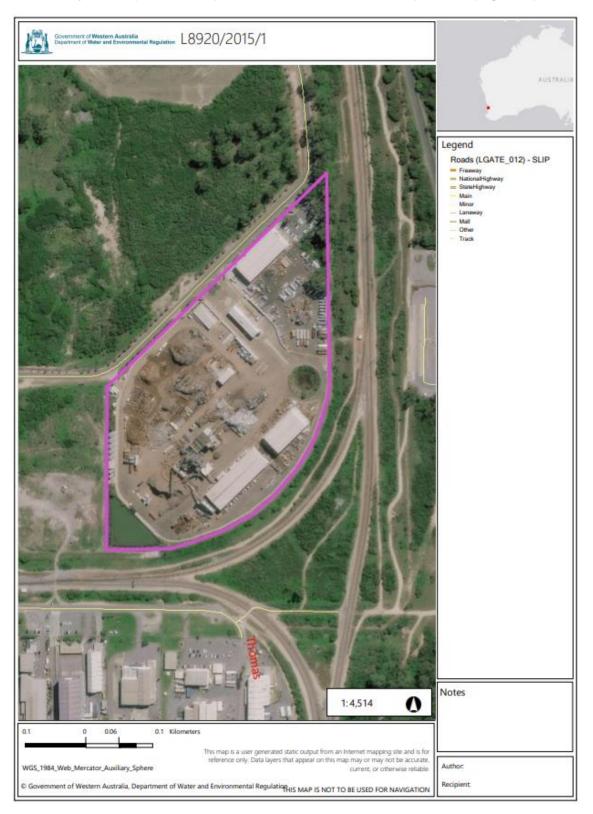
Term	Definition
quarterly	means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December, and in the following year 1 January to 31 March and 1 April to 30 June.
Schedule 1	means Schedule 1 of this licence
Schedule 2	means Schedule 2 of this licence
Schedule 3	means Schedule 3 of this licence
Schedule 4	means Schedule 4 of this licence
Schedule 5	means Schedule 5 of this licence
Schedule 6	means Schedule 6 of this licence
shut-down	means the period when plant or equipment is brought from normal operating conditions to inactivity.
six-monthly	means the two inclusive periods from 1 July to 31 December, and in the following year the period 1 January to 30 June.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions.
usual working day	means 08:00-17:00hours, Monday to Friday, excluding public holidays in Western Australia.
waste	has the same meaning given to that term under the EP Act.
waste type	means waste types identified in the Landfill Definitions.
μg/L	means micrograms per litre
μS/cm	means microsiemens per centimetre

END OF CONDITIONS

Schedule 1: Maps

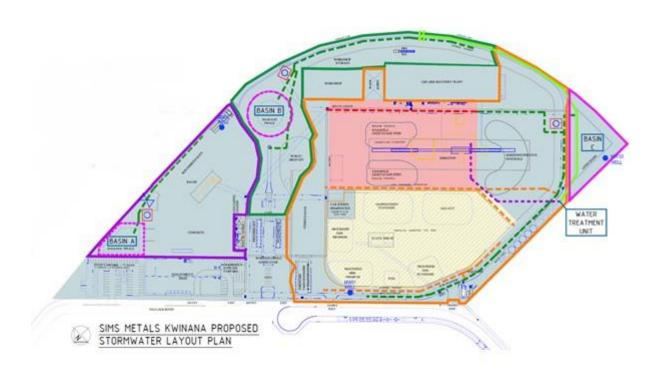
Premises map

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



Premises catchment areas map

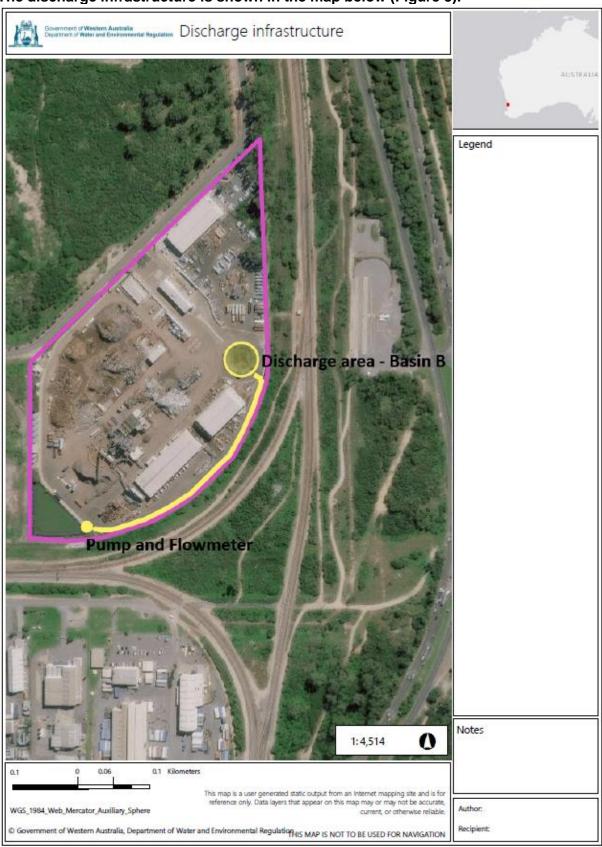
The boundary of the prescribed premises is shown in the map below (Figure 2).





Discharge Infrastructure map

The discharge infrastructure is shown in the map below (Figure 3).



Groundwater monitoring location map

The location of groundwater monitoring bores is shown in the map below (Figure 4).



Bore number	Easting (MGA94)	Northing (MGA94)
GWS1	385461.842	6434395.221
GWS2	385415.850	6434207.762
GWS3a	385214.850	6434031.305
GWS5	385507.194	6434194.882

Note: Bore GWS4 has been capped and is not required to be monitored under this licence

Schedule 2: Noise monitoring

The licence holder shall at all times when the shredder is operational, undertake continuous premises boundary monitoring of dB, L_{A Slow max}, L_{A peak} and L_{Liner peak} using one sound level measuring instrument at the premises boundary that meets the following specifications:

- (a) ability to simultaneously and continuously measure L_{A Max Slow}, L_{A peak} and L_{Liner peak};
- (b) calibrated in accordance with Clause 2 of Schedule 4 in the *Environmental Protection* (Noise) Regulations 1997;
- (c) frequency unweighted response <±3dB between 10Hz and 500Hz; and
- (d) data acquisition storage capability of at least one day's data at 1 minute intervals.

The licence holder shall, in the event of an air blast:

- (a) download the data from the instrument required by the above as soon as is practicable and within at least 12 hours of the air blast;
- (b) extract the 1-minute measurement period when the air blast occurred to calculate the level L_{A peak} - L_{A Slow max}, and where this level is more than 15 dB, apply an adjustment of + 10 dB(A) to the L_A max Slow level to adjust for impulsiveness in accordance with Clause 3 of Schedule 4 of the Regulations;
- (c) prepare a report which shall indicate the relevant 1-minute measurement period to include the time and date, L_{Liner peak}, L_{A peak}, and the L_{A Slow max} values (adjusted for impulsiveness where necessary);
- (d) where the $L_{A Slow max}$ level is >90 dB(A), the licence holder shall highlight the adjustment applied to the $L_{A Slow max}$ values in the report; and
- (e) submit the report as required by conditions 29 and 32.

Schedule 3: Process stormwater monitoring

The licence holder must monitor process stormwater for concentrations of the identified parameter(s) in accordance with Table 10.

Table 10: Process stormwater monitoring

Monitoring location	Parameter	Units	Averaging period	Frequency	Method
Basin C as	pH ¹	-	Spot sample	Quarterly	Spot sample, in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
shown on Figure 2 in	Electrical conductivity	μS/cm			
Schedule 1	Total Recoverable Hydrocarbons	mg/L or μg/L			
	Aluminium				
	Arsenic				
	Cadmium				
	Chromium (III)				
	Chromium (IV)				
	Copper				
	Manganese				
	Nickel				
	Lead				
	Zinc				
	Benzene, toluene, ethylbenzene and xylenes (BTEX)				
	Total Polycyclic Aromatic Hydrocarbons (PAH)				
	Napthalene				
	Total Polychlorinated biphenyls (PCB)				
	Trichloroethane (TCE)				
	Tetrachloroethane (PCE)				
	1,2 dichloroethane				
	Ethylene glycol				

Note 1: In-field non-NATA accredited sampling permitted

Schedule 4: Discharge to land monitoring

The licence holder must monitor discharges to land for concentrations of the identified parameter(s) in accordance with Table 11.

Table 11: Discharge to land monitoring

Discharge point	Monitoring location	Parameter	Unit	Averaging period	Frequency	Method
Basin B	Flow metre as shown on Figure 3 in Schedule 1	Volumetric flow rate (cumulative)	Litres/day or ML/day	Continuous	Duration of each discharge	Flow meter
	Basin C as	pH ¹	-	Spot	Within 7	Spot sample, in accordan ce with AS/NZS
	shown in Figure 2 in	Electrical conductivity	μS/cm	sample	days of a discharge	
	Schedule 1	Total Recoverable Hydrocarbons	mg/L or µg/L		from Basin C	
		Aluminium				5667.1 and
		Arsenic				AS/NZS 5667.10
		Cadmium				3007.10
		Chromium (III)				
		Chromium (IV)				
		Copper				
		Manganese				
		Nickel				
		Lead				
		Zinc				
		Benzene, toluene, ethylbenzene and xylenes (BTEX)				
		Polycyclic Aromatic Hydrocarbons				
		Napthalene				
		Total Polychlorinated biphenyls (PCB)				
		Trichloroethane (TCE)				
		Tetrachloroethane (PCE)				
		1,2 dichloroethane				
		Ethylene glycol				

Note 1: In-field non-NATA accredited analysis permitted.

Schedule 5: Groundwater monitoring

Groundwater monitoring

The licence holder must monitor groundwater for concentrations of the identified parameter(s) in accordance with Table 12.

Table 12: Groundwater monitoring of ambient concentrations

Monitoring well location	Parameter	Unit	Frequency	Method
GWS1, GWS2, GWS3a, GWS5 as shown in	Standing water level	mBGL	Six-monthly	Spot sample, in accordance with AS/NZS 5667.1 and AS/NZS 5667.11.
	pH¹	-		
	Electrical conductivity	μS/cm	1	
Schedule 1: Maps	Total recoverable hydrocarbons	mg/L		
apo	Aluminium			
	Arsenic			
	Cadmium			
	Chromium (III)			
	Chromium (IV)			
	Copper			
	Manganese			
	Nickel			
	Lead			
	Zinc			
	Benzene, toluene, ethylbenzene and xylenes (BTEX)			
	Polycyclic aromatic hydrocarbons			
	Napthalene			
	Total nitrogen			
	Nitrate			
	Nitrite			
	Total Polychlorinated biphenyls (PCB)			
	Trichloroethane (TCE)			
	Tetrachloroethane (PCE)			
	1,2 dichloroethane			
1	Ethylene glycol			

Note 1: In-field non-NATA accredited analysis permitted.

Schedule 6: Quality assurance and quality control requirements for monitoring programs

The licence holder must adhere to the following field quality assurance and quality control procedures, as specified in Schedule B2 of the Assessment of Site Contamination NEPM, and must include as a minimum:

- (a) decontamination procedures for the cleaning of tools and sampling equipment before sampling and between samples;
- (b) field instrument calibration for instruments used on site;
- (c) blind replicate samples and rinsate blanks must be collected in the field and sent to the primary laboratory to determine the precision of the field sampling and laboratory analytical program;
- (d) completed field monitoring sheets / sampling logs for each sample collected, showing:
 - (i) time of collection;
 - (ii) location of collection;
 - (iii) initials of sampler;
 - (iv) sampling method;
 - (v) field analysis results;
 - (vi) duplicate type / location (if relevant); and
 - (vii) site observations and weather conditions, and
- (e) chain-of-custody documentation must be completed which details the following information:
 - (i) site identification;
 - (ii) the sampler;
 - (iii) nature of the sample;
 - (iv) collection time and date;
 - (v) analyses to be performed;
 - (vi) sample preservation method;
 - (vii) departure time from site;
 - (viii) dispatch courier(s); and
 - (ix) arrival time at the laboratory.