Licence number L9336/2022/1

Licence holder Hastings Technology Metals Ltd

**ACN** 122 911 399

Registered business address Level 3

5 Miller Street

PERTH WA 6000

**DWER file number** DER2022/000260

**Duration** 12 October 2022 to 30 June 2036

Date of issue 12 October 2022

Date of amendment 17 May 2024

Premises details Yangibana Rare Earths Project

Legal description -

G09/14, M09/158, M09/157, G09/18, G09/17, G09/20, G09/26, L09/69, L09/93, L09/95, M09/161,

M09/162, M09/176 and M09/178 WEST LYONS RIVER WA 6705

As defined by the coordinates in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed design capacity
Category 12: Screening, etc. of material	500,000 tonnes per annum
Category 54: Sewage facility	148.8 m³/day
Category 64: Class II or III putrescible landfill site	3,487 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 17 May 2024, by:

# SENIOR ENVIRONMENTAL OFFICER, INDUSTRY REGULATION REGULATORY SERVICES

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

### **Licence history**

Date	Reference number	Summary of changes	
17/06/2020	W6209/2019/1	Works approval granted	
10/06/2022	W6209/2019/1	Works approval amended	
12/10/2022	L9336/2022/1	Licence issued	
17/05/2024	L9336/2022/1	<ul> <li>Inclusion of category and infrastructure related to:         <ul> <li>Category 12 - installing a new mobile Crushing and Screening Plant and adding Mining Tenements M09/161, M09162 and G09/17 where the plant will be operating;</li> <li>Category 54 - addition of the RO Plant, WWTP and irrigation field (Stage 1 and Stage 2) that were constructed under Works Approval W6158/2018/1 and are currently in TLO; and</li> </ul> </li> <li>Category 64 - add Mining Tenements M09/178 and G09/26 to include the proposed Auer North Waste Rock Landform Landfill from Works Approval W6208/2019/1.</li> </ul>	

### 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:

#### Infrastructure and equipment requirements

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment operation requirements

Item	Site infrastructure and equipment	Operational requirement	Infrastructure location
Categ			
1	Crushing and Screening Plant	<ul><li>(a) Only to be used at locations stated in Figure 1.</li><li>(b) Suppression sprays must be maintained operational on the mobile crushing plant crusher discharge and conveyor discharge point;</li></ul>	Figure 1
		(c) Drainage and diversion channels must be maintained to manage stormwater;	
		(d) Spills are to be cleaned up immediately with spill kits available;	
		(e) Where drainage channels are within 100 m of the borrow pits, diversion channels will be constructed, to ensure surface water drainage is unimpeded and unaffected by the borrow pits; and	
		(f) Mobile crushing and screening activities will not be located within 50m (100m buffer) of watercourses or sensitive receptors.	
Categ	ory 54		
2	WWTP	<ul> <li>(a) All sewage and storage treatment tanks, vessels transfer pipelines and conveyance infrastructure must be maintained impermeable and free of leaks or defects;</li> </ul>	Figure 2
		(b) Stormwater is prevented from entering the sewage treatment system and storage infrastructure;	
		(c) Flow meters are maintained on the WWTP inlet and outlet to the irrigated discharge area;	
		(d) Alarm system maintained functional;	
		(e) Chemicals must be stored separately with an above ground vessel/s located on a hardstand enclosed by bunds in accordance with Australian Standard AS3780; and	
		(f) WWTP should be maintained to treat sewage to	

		the follow discharge targets:	
		(i) BOD <20 mg/L;	
		(ii) TSS <30 mg/L;	
		(iii) TDS <1,000 mg/L;	
		(iv) TN <30 mg/L;	
		(v) TP <8 mg/L;	
		(vi) pH range of 6.8 – 8.5; and	
		(vii) E. coli <1,000 colony forming units (cfu) per 100 mL.	
3	Irrigation field	(a) No more than 148.8 m³/day of blended effluent can be applied per day to the irrigation fields as defined in Figure 2;	Figure 2
		(b) Irrigation is managed to prevent ponding and pooling of effluent in the ground surface of the irrigation discharge area; and	
		(c) No blended effluent is permitted to enter any watercourse.	
4	RO brine pipeline	(a) Must be impermeable and free of leaks and defects;	Figure 2
		(b) Volumetric flow meters are maintained to monitor daily volume of RO brine delivered to the WWTP irrigation storage tanks; and	
		(c) No more than 50 m³/day of RO brine is supplied to the WWTP.	
Cate	gory 64		
5	Bald Hill Waste Rock Landform Landfill	(a) As per Condition 3, Condition 4, Condition 5 Table 5, Condition 6, Condition 7 Table 5 and Condition 8;	Figure 1
6	Frasers Waste Rock Landform Landfill	(b) Daily inspections of tipping faces; and	
7	Auer North Waste Rock Landform Landfill	(c) Daily collection of windblown litter.	

#### 2. The licence holder must:

- (a) construct and/or install the infrastructure and equipment;
- (b) in accordance with the corresponding design and construction / installation requirements;
- (c) at the corresponding infrastructure location; and
- (d) within the corresponding timeframe,

as set out in Table 2.

**Table 2: Installation requirements** 

Item	Site infrastructure and equipment	Installation requirement	Infrastructure location
Cate	gory 12		
1	Crushing and Screening Plant	<ul> <li>(a) Crushing and Screening Plant will consist of: <ul> <li>(i) Primary jaw crusher;</li> <li>(ii) Secondary crusher;</li> <li>(iii) Scalping screen;</li> <li>(iv) Reclaimer screen; and</li> <li>(v) Stacker conveyor;</li> </ul> </li> <li>(b) Drainage and diversion channels to be constructed in areas where plant will operate and within 100 m of the borrow pits; and</li> <li>(c) Suppression sprays on the crusher discharge and conveyor discharge point.</li> </ul>	Figure 1
Cate	gory 54		
2	WWTP	(a) Earthen bunding constructed around the perimeter of the WWTP.	Figure 1
Cate	gory 64		
3	Auer North Waste Rock Landform Landfill	<ul> <li>(a) Putrescible waste landfill bunker and inert waste landfill bunker at the location as shown in Figure 1;</li> <li>(b) Bunkers to be nominally 50 m long, 10 m wide and 2 m deep;</li> <li>(c) Bunkers are to incorporate an approximate 2 percent slope to the rear to retain stormwater collected within bunkers;</li> <li>(d) Bunkers are to include perimeter stormwater diversion drainage;</li> <li>(e) Landfill must be located greater than 3m above the groundwater table;</li> <li>(f) Landfill site located at least 200m from the closest point of the creek and outside the 1% AEP flood zones;</li> <li>(g) Fencing to prevent unauthorised access, fauna access and windblown waste;</li> <li>(h) Bunkers located at least 250m from Frasers Creek; and</li> <li>(i) Stormwater diversion drainage earthen bunding must be constructed surrounding the landfill trenches to prevent the ingress of stormwater.</li> </ul>	Figure 1

#### **Premises operation**

- 3. The licence holder must only accept waste onto the Premises if:
  - (a) it is of a type listed in; and
  - (b) the quantity accepted is below any quantity limit listed in; and
  - (c) it meets any specification listed in; and
  - (d) in the case of Contaminated Solid Waste, is supported by documentation that demonstrates compliance with the accepted criteria for Class II landfills.

**Table 3: Waste acceptance** 

Waste type	Quantity limit tonnes/ year	Specification <sup>1</sup>
Inert Waste Type 1		Waste containing visible asbestos or ACM must not be accepted.
Inert Waste Type 2	3,487 tonnes	Used tyres and plastics only.
Clean Fill	(combined total, excluding	None specified.
Contaminated Solid Waste	recyclables)	Must meet the acceptance criteria for Class II
Putrescible Waste		landfills.

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos) 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 wastes accepted onto the Premises are only subjected to the processes set out in Table 4 and in accordance with any process limits described in that table.

**Table 4: Waste processing** 

Waste type	Process(es)	Process limits <sup>1</sup>	
Inert Waste Type 1		All waste types	
Inert Waste Type 2	Receipt, handling and	<ul> <li>Disposal of waste by landfilling shall only take place within the landfill area shown on the Landfill Map in Schedule 1.</li> </ul>	
Clean Fill	disposal of waste by	0	
	landfilling	Green waste shall only be chipped/mulched; and	
Putrescible Waste		Disposal of green waste or tyres by burning is prohibited.	

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

- 6. The licence holder must manage the landfilling activities to ensure:
  - (a) waste is levelled and compacted within a week after it is discharged;
  - (b) waste is placed and compacted to ensure all faces are stable and capable of retaining rehabilitation material; and
  - (c) restoration of a closed landfill cell takes place within 6 months after disposal has been completed.
- 7. The licence holder must ensure that cover is applied and maintained on landfilled wastes in accordance with Table 5 and that sufficient stockpiles of cover are maintained on the site at all times.

**Table 5: Cover requirements** 

Waste Type	Material	Depth	Timescales	
		100 mm	By the end of the working day in which the waste was deposited.	
Inert Waste Type 2	Type 1 Inert waste or soil		Plastic with the potential to become windblown shall be covered as soon as practicable after deposit.	
Putrescible Waste		150 mm	Weekly, as required under the Environmental Protection (Rural Landfill) Regulations 2002	
Inert Waste Type 1, Clean Fill	No cover requ	uired		

- 8. The licence holder must implement the following security measures at the site:
  - (a) erect and maintain suitable fencing to prevent unauthorized access to the site;
  - (b) ensure that any entrance gates to the premises are securely locked when the premises are unattended; and
  - (c) undertake regular inspections of all security measures and repair damage as soon as practicable.

### **Emissions and discharges**

9. The licence holder must ensure that emissions specified in Table 6 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 6: Emissions to land

Emission	Discharge point	Discharge point location	
Treated effluent and RO brine mixture from WWTP final irrigation tank	WWTP spray field	Figure 2	

 The licence holder must operate and maintain a surface water management system that prevents stormwater run-off from becoming contaminated by waste on the premises.

#### Windblown waste

11. The licence holder must ensure that windblown waste is contained within the boundary of the premises and that windblown waste is returned to the tipping area on at least a weekly basis.

#### **Monitoring**

#### **General monitoring**

- 12. The licence holder must ensure that:
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
  - (c) all microbiological samples are collected and preserved in accordance with AS/NZS 2031; and
  - (d) all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in relevant table.
- 13. The licence holder must ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

#### Monitoring of point source emissions to land

- 14. The licence holder must monitor emissions:
  - (a) from each discharge point;
  - (b) at the corresponding monitoring location;
  - (c) for the corresponding parameter;
  - (d) at the corresponding frequency;
  - (e) for the corresponding averaging period;
  - (f) in the corresponding unit; and
  - (g) using the corresponding method,

as set out in Table 7.

Table 7: Emissions and discharges monitoring

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Method
Sprinklers within the irrigation field	WWTP outlet	Cumulative flow volume <sup>1</sup> of wastewater discharged to irrigation fields	Continuous	Cumulative daily	kL/day	N/A
		pH <sup>1</sup>	Continuous or daily		pH units	AS/NZS 5667.1,
		Residual chlorine <sup>1</sup>	or daily		mg/L	AS/NZS

	E. coli	Quarterly	Spot	cfu/100mL	5667.10 AS/NZS
	Total coliforms		sample		2031Ho w i
	BOD₅			mg/L	•••
	TSS				
	TDS				
	TN				
	TP				
	Chemical Oxygen Demand				

Note 1 – non-NATA in situ testing permitted

#### **Monitoring of inputs and outputs**

15. The licence holder must undertake the monitoring in Table 8 according to the specifications in that table.

**Table 8: Monitoring of inputs and outputs** 

Input/Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	<ul> <li>Contaminated solid waste</li> <li>Inert Waste Type 1</li> <li>Inert Waste Type 2</li> <li>Putrescible Waste</li> </ul>	Tonnes, m³ or number of tyres	N/A	Each load disposed of at the premises
Sewage inlet flow	Volumetric flow rate (cumulative)	m³/day	Monthly	Continuous
RO brine inlet flow	Volumetric flow rate (cumulative)	m³/day	Monthly	Continuous
Treated effluent RO brine discharge to irrigation fields	Volumetric flow rate (cumulative)	m³/day	Monthly	Continuous

#### **Records and reporting**

- 16. 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.
- 17. 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 90 calendar days after the end of that annual period an Annual Audit Compliance Report in the approved form.
- 18. 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) waste records kept in accordance with condition 15, Table 8 of this licence
  - (c) complaints received under condition 16 of this licence.
  - (d) any maintenance of infrastructure that is performed in the course of complying with conditions of this licence; and
  - (e) the works conducted in accordance with condition 2, Table 2 of this licence.
- 19. The books specified under condition 18 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.
- 20. The licence holder must ensure that the conditions listed in Table 9 are notified to the CEO in accordance with the notification requirements of the Table 9.

**Table 9: Notification conditions** 

Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
Condition 2, Table 2	The licence holder must:  (a) undertake an audit of their compliance with the requirements of Condition 2, Table 2;  (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance; and  (c) the Environmental Compliance Report required, must include as a minimum the following:  (i) certification by a suitably qualified person that the items of infrastructure or component(s) thereof, as specified in Condition 2, Table 2 have been constructed /	Within 30 calendar days of an item of infrastructure or equipment required by Condition 2, Table 2 being constructed / installed	None specified

requirements specified in Condition 2, Table 2;
(ii) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in Condition 2, Table 2; and
(iii) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

21. The licence holder must submit to the CEO by no later than 90 calendar days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 10, and which provides information in accordance with the corresponding requirement(s) set out in Table 10.

**Table 10: 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.
1, Table 1	Summary of any treatment capacity exceedances and any action taken.
14, Table 7	(a) volume (in m³ or kL) of treated wastewater applied daily to each irrigation area, and monthly cumulative volumes presented in table format;
	(b) treated wastewater monitoring data in tabulated and graphical form including the sampling date;
	(c) tabulated monthly and annual loadings of nitrogen, phosphorus and BOD applied to each irrigation area, including an explanation of the basis for determining loading rates;
	(d) an assessment and interpretation of the data, including comparison to historical trends and loading limits; and
	(e) copies of laboratory sample analysis reports.
15, Table 8	(a) Waste Inputs;
	(b) Sewage inlet flow;
	(c) RO brine inlet flow; and
	(d) Treated effluent RO brine discharge to irrigation field.

## **Definitions**

In this licence, the terms in Table 11 have the meanings defined.

**Table 11: Definitions** 

Term	Definition
AACR	means Annual Audit Compliance Report
acceptance criteria	has the meaning defined in Landfill Definitions.
ACN	Australian Company Number
ACM	means asbestos containing material and has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009).
AEP	Annual Exceedance Probability
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 January until 31 December of the immediately following year.
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external website.
AS3780	means the Australian Standard AS 3780 The Storage and Handling of Corrosive Substances
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters
AS/NZS 2031	Means the Australian Standard AS/NZS 2031 - Selection of containers and preservation of water samples for microbiological analysis
BOD	Biological Oxygen Demand
books	has the same meaning given to that term under the EP Act.

Term	Definition
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
Contaminated Solid Waste	has the meaning defined in the Landfill Definitions.
controlled waste	has the definition in Environmental Protection (Controlled Waste) Regulations 2004.
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.
discharge	has the same meaning given to that term under the EP Act.
E.coli	Escherichia coli
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)
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.
Inert Waste Type 2	has the meaning defined in the Landfill Definitions.
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.
m³/day	means cubic metres per day.
mg/L	means milligrams per litre.
NATA	means the National Association of Testing Authorities, Australia.
NATA	means in relation to the analysis of a sample that the laboratory is

Term	Definition
accredited	NATA accredited for the specified analysis at the time of the analysis.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Putrescible Waste	has the meaning defined in the Landfill Definitions.
RO	Reverse Osmosis Plant
Spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TDS	Total Dissolved Solids
TLO	Time Limited Operations
TN	Total Nitrogen
TP	Total Phosphorus
TSS	Total Suspended Solids
waste	has the same meaning given to that term under the EP Act.
WWTP	Wastewater Treatment Plant.

#### **END OF CONDITIONS**

# Schedule 1: Maps

### **Premises map**

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

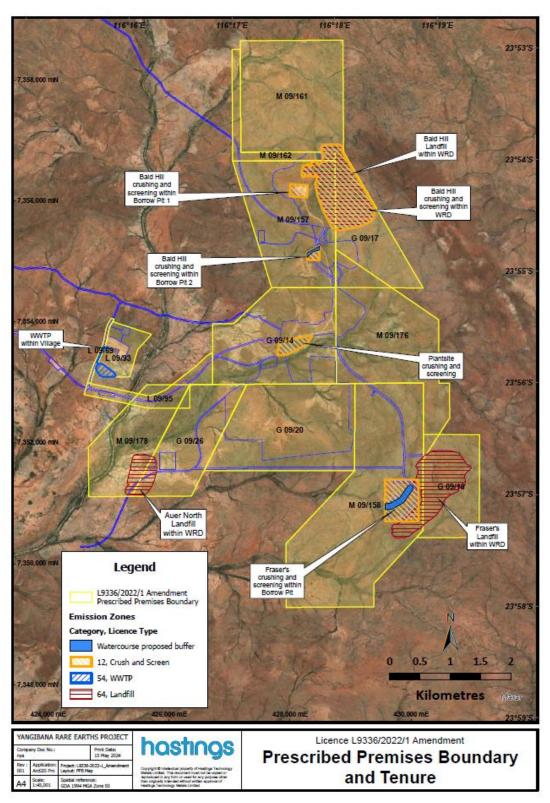


Figure 1: Map of the boundary of the prescribed premises

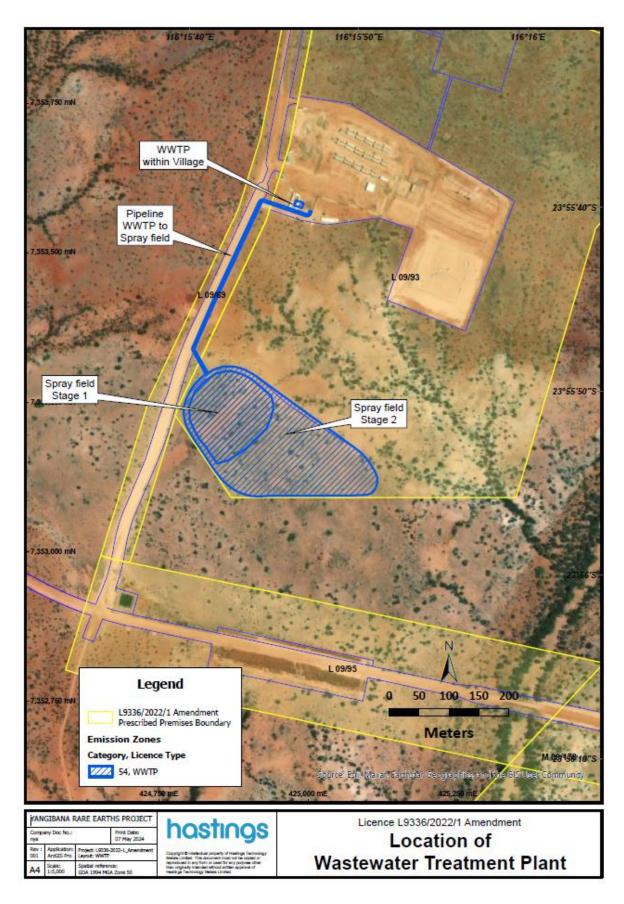


Figure 2: WWTP and irrigation field (shows Stage 1 and Stage 2)