



Licence number	L9422/2024/1
Licence holder	Fenix Resources Ltd
ACN	125 323 622
Registered business address	Office 10, 1202 Hay St West Perth WA 6005
DWER file number	DER2023/000625
Duration	14/03/2024 to 13/03/2029
Date of issue	14/03/2024
Premises details	Iron Ridge Project Legal description – Mining Lease: M20/118 Miscellaneous Licence: L20/83; L20/84; L20/85 General Purpose Lease: G20/28 As depicted in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which — (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	1,500,000 tonnes per year
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	320,000 tonnes per year
Category 85: Sewage facility: premises - (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters	25 m ³ per day

Department of Water and Environmental Regulation

This licence is granted to the licence holder, subject to the attached conditions, on 14 March 2024, by:

**MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES**

*Officer delegated under section 20
of the Environmental Protection Act 1986*

Licence history

Date	Reference number	Summary of changes
14/03/2024	L9422/2024/1	Licence granted

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.

Assessment and regulation of a prescribed premises under Part V of the *Environmental Protection Act 1986* does not exempt an occupier from requiring other approvals or from the Department taking action under the Department's other functions.

Licence conditions

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

Infrastructure and equipment

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 requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Semi Mobile Modular Crushing and Screening Plant	<ul style="list-style-type: none"> (a) Water misting sprays must be operated throughout the plant and on conveyor belt, scalping screen and material discharge points when in operation (excluding times when rainfall is sufficient to suppress dust); (b) Undertake daily visual inspections of skirting seals and dust box covers located on the conveyor belt are undertaken and repairs undertaken within 48 hours; (c) Undertake daily visual inspections of head chutes on head pulleys and repairs undertaken within 48 hours; (d) Ensure the Jaw Crusher and Cone Crusher are located within a closed circuit when in operation; (e) Ensure stormwater drainage containment infrastructure is maintained around the crushing and screening plant; (f) Undertake monthly visual inspections of dust present on foliage of vegetation and species health around the crushing and screening plant and transport roads; and (g) Record volumes of all material processed through the crushing and screening plant. 	Figure 2
Dewatering pipelines	<ul style="list-style-type: none"> (a) Undertake weekly inspections of the dewatering pipelines to ensure pipework is located within v-drains and check for damage, ruptures and / or leaks; and (b) The volumetric flow meter located on the outlet pipe must be calibrated. 	Figure 2
Tristar Submerged Aerated Filter (SAF) Wastewater Treatment Plant	<ul style="list-style-type: none"> (a) Monthly monitoring of the quality of the effluent must be undertaken to ensure that water quality is trending towards stabilisation; and (b) Spills of wastewater or chemicals outside of a vessel/container/pipeline must be cleaned up immediately and the waste disposed of to an appropriately licensed facility. 	Figure 2
Irrigation area, irrigation system, irrigation pipelines and pumps connected to the final treated wastewater	<ul style="list-style-type: none"> (a) Irrigation system valves, pumps, pipelines, and other fittings must be maintained and inspected daily for ruptures or leaks when irrigating; (b) A buffer of 5 meters must be maintained around the irrigation spray-field; (c) Repairs must be undertaken immediately to repair ruptures or leaks; (d) Spray irrigator to be maintained to ensure no blockages to 	Figure 2

Site infrastructure and equipment	Operational requirement	Infrastructure location
storage tank.	<p>allow even and effective spray production and ensure mobility, stopping and cut-off mechanisms are functioning as per equipment design;</p> <p>(e) Spray irrigator operated to deliver treated wastewater at a rate of 25 litres per minute with a spray radius of 30 metres;</p> <p>(f) Records must be kept of all maintenance conducted and results of all routine irrigation system equipment and infrastructure inspections;</p> <p>(g) Fence to be maintained to exclude access to irrigation spray field and repairs must be undertaken within 48 hours of detecting damage;</p> <p>(h) No more than 35 m³ of treated effluent and brine wastewater must be discharged per day;</p> <p>(i) Irrigation via low drift fan-spray nozzles must be spaced for even distribution across the spray-field;</p> <p>(j) Spray field irrigation discharge points must be rotated to prevent pooling of wastewater and build-up of nutrients in soil; and</p> <p>(k) A buffer of 5 meters must be maintained around the irrigation spray-field.</p>	
Refuelling activities	Hydrocarbon spill clean-up material (kits) must be available to clean up hydrocarbon spills across the premises.	NA

Emissions and discharges

Discharges to land and surface water

2. The Licence Holder must ensure that the emissions specified in Table 2 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 2: Authorised discharge points

Emission	Discharge point	Discharge point location
Treated wastewater from the SAF Wastewater Treatment Plant	WWTP spray field	Irrigation field as shown in Schedule 1: Maps Figure 2
Mine dewater discharge	Water storage dam	Water storage dam as shown in Schedule 1: Maps Figure 2

3. The licence holder must ensure that emissions from the discharge point listed in Table 3 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 2.

Table 3: Emission limits

Discharge point	Parameter	Limit
Irrigation Spray-field discharge location as shown in Schedule 1, Figure 2.	Biochemical oxygen demand 5-day (BOD5)	10.1 mg/L
	Total Suspended Solids (TSS)	30 mg/L
	Total Dissolved Solids (TDS)	1300 mg/L
	Total Nitrogen (TN)	30 mg/L
	Total Phosphorous	8 mg/L
	Residual chlorine	2 mg/L
	pH	6.5-8.5
	<i>E.coli</i>	1000 cfu/100ml

4. The licence holder must ensure where saline water is used for dust suppression, damage to surrounding vegetation is avoided.

Monitoring

Discharge monitoring

5. The licence holder must monitor emissions in accordance with the requirements specified in Table 4 and record the results of all such monitoring.

Table 4: Emissions and discharge monitoring

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Method
Irrigation Field	Flow meter	Volume	Continuous	Cumulative daily	kL/day	N/A
	Effluent pipeline	<i>E. coli</i>	Quarterly	Spot sample	cfu/100mL	AS/NZS 5667.1, AS/NZS 5667.10; and, AS/NZS 2031
		Biological Oxygen Demand (BOD)			mg/L	
		Total Suspended Solids (TSS)				
		Total Dissolved Solids (TDS)				
		Total				

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		Nitrogen (TN)				
		Total Phosphorous				
		Residual chlorine				
		pH ¹			pH units	
Dewatering pond	Meter readings	Cumulative discharge volume	Monthly	Continuous while discharging	kL	N/A

Note 1 – non-NATA in situ testing permitted

Note 2 – 6 monthly monitoring is undertaken such that there is at least 5 months in between the days on which sampling is taken

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

Monitoring of inputs and outputs

7. The licence holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Monitoring of inputs and output

Input/Output	Parameter	Units	Averaging period	Frequency
Sewage – Inlet flow	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater –discharge to irrigation field	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous

Records and reporting

8. 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.
9. 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;

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- (b) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;
 - (c) monitoring programmes undertaken in accordance with conditions 5 and 7 of this licence; and
 - (d) complaints received under condition 8 of this licence.
- 10.** The books specified under condition 9 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.
- 11.** The licence holder must ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the licence and has access at all times to the licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 12.** 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 60 days after the end of that annual period an Annual Audit Compliance Report in the approved form.
- 13.** 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 6, and which provides information in accordance with the corresponding requirement(s) set out in Table 6.

Table 6: Annual Environmental Report

Conditions	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
Condition 5 Table 4	<ul style="list-style-type: none"> (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; (e) copies of laboratory sample analysis reports; and (f) Dewater discharge flow metering data.
Condition 7 Table 5	<ul style="list-style-type: none"> (a) Sewage – Inlet flow (b) Treated wastewater –discharge to irrigation field
8	Complaints summary

Definitions

In this licence, the terms in Table 7 have the meanings defined.

Table 7: Definitions

Term	Definition
ACN	Australian Company Number
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 on 1 July until 30 June of the immediately following year.
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
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external website.
BOD	Biological Oxygen Demand
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. “submit to / notify the CEO” (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
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.

Term	Definition
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
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.
m ³ /day	means cubic metres per day.
mg/L	means milligrams per litre.
monthly period	means a one-month period commencing from [day X] of a month until [day (X+1)] of the immediately following month. e.g. "means a one-month period commencing from the seventh day of a month until the sixth day of the immediately following month."
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
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.
Spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TSS	Total Suspended Solids
WWTP	means 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).

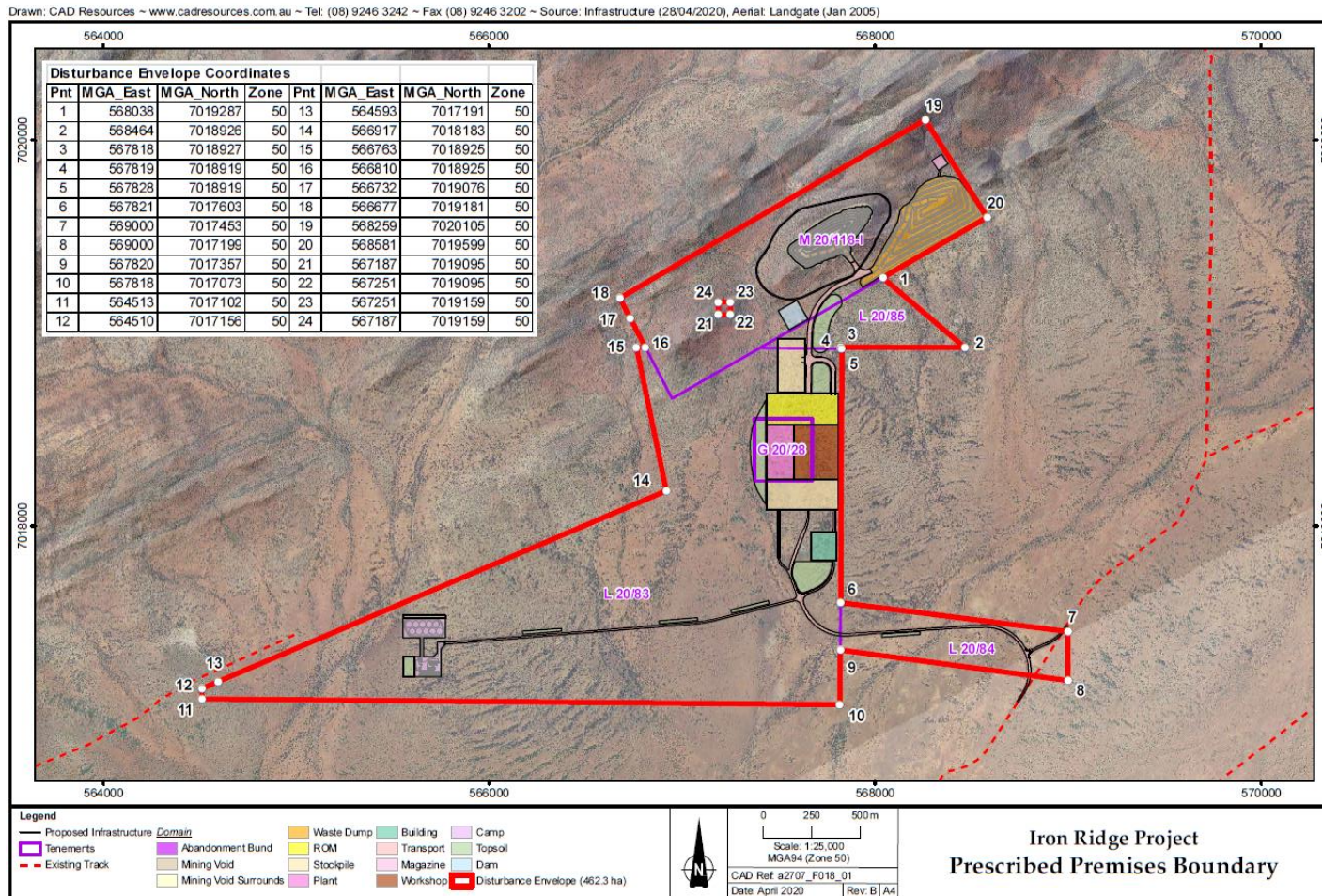


Figure 1: Map of the boundary of the prescribed premises

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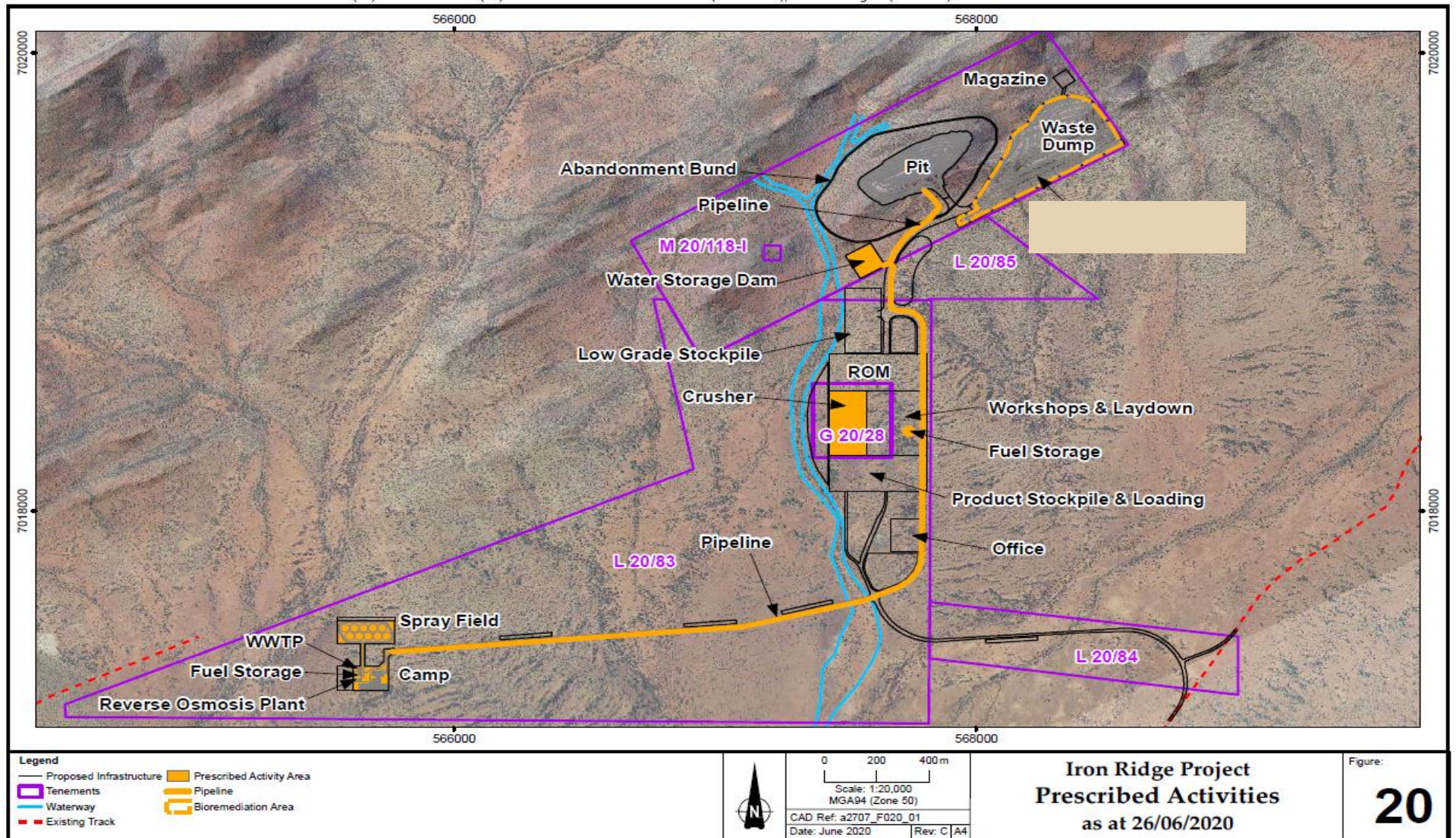


Figure 2: Prescribed Activities

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