



Licence number	L9430/2024/1	
Licence holder	Onslow Iron Pty Ltd	
ACN	649 012 395	
Registered business address	20 Walters Drive OSBORNE PARK WA 6017	
DWER file number	DER2024/000061	
Duration	22/05/2024 to	21/05/2034
Date of issue	22/05/2024	
Date of amendment	23/08/2024	
Premises details	West Pilbara Iron Ore Project M08/480, M08/484, G08/88, L08/67, L08/68, L08/69 and L08/181 CANE WA 6710	

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	7,000,000 tonnes per annual period
Category 54: Sewage facility	250 m ³ /day of treated effluent, plus 164 m ³ /day of RO brine
Category 77: Concrete batching or cement products manufacturing	630,720 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 23 August 2024, by:

**MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATE-WIDE DELIVERY)**
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
22/05/2024	L9430/2024/1	Licence granted for Category 54.
23/08/2024	L9430/2024/1	<p>Licence amendment for the following:</p> <ul style="list-style-type: none"> • Addition of Category 5 for the operation of the ROM Mobile Crushing and Screening Plant that was implemented under Works Approval W6769/2023/1; • Addition of Category 77 for the Concrete Batching Plant that is currently approved under Registration R2550/2024/1; and • Use of Reverse Osmosis reject brine in dust suppression.

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:

Waste acceptance

1. The licence holder must only accept onto the premises waste of a type that:
 - (a) does not exceed the rate at which that waste is received; and
 - (b) meets the relevant acceptance specification, as set out in Table 1.

Table 1: Waste acceptance criteria

Waste type	Rate at which waste is received	Acceptance specification
Sewage	250 m ³ /day	Accepted via sewer inflows

Waste processing

2. The licence holder must ensure that the waste types specified in Table 2 are only subjected to the corresponding processes, and subject to the corresponding process specifications as set out in Table 2.

Table 2: Waste processing

Waste type	Processes	Process limits and specifications
Sewage	Biological, chemical and physical treatment	Must not exceed 250 m ³ /day
RO brine	Dilution with treated effluent prior to disposal via irrigation	Must not exceed 164 m ³ /day
	Pumped to water storage infrastructure that may include turkey nest dams and/or be contained in storage tanks, and will be applied as dust suppression only to pre-disturbed locations throughout the prescribed premises	TDS must not exceed 4,000 mg/L
Blended effluent	Disposal via irrigation	Irrigated at a rate of no more than 414 m ³ /day

Infrastructure and equipment

3. 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												
Category 5														
ROM Mobile Crushing and Screening Plant	<ul style="list-style-type: none"> • Mult-Stage Mobile Crushing and Screening Plant consisting of: <ul style="list-style-type: none"> ➢ Crushers, including: jaw, cone, impact, HPGR; ➢ Screens; and ➢ Conveyors and stackers. • Maintain the following controls as a minimum to manage dust emissions: <ul style="list-style-type: none"> ➢ Spray bars fitted on conveyors; ➢ Spray bars fitted at crusher inlets and outlets; ➢ ROM feed material conditioned with water during delivery and stockpiling; ➢ Use of water truck to condition ROM stockpile face; ➢ Use of water truck to wet down ROM pad, loader running tracks and mobile crushing plant general area. <p>Volumes of ore processed through the crushing and screening plant to be recorded.</p> <ul style="list-style-type: none"> • Maintain the following stormwater controls: <ul style="list-style-type: none"> ➢ The area around the mobile crushing and screening plant has been windrowed, directing any storm water run-off towards a sediment pond near the stockyard; and ➢ Flood waters in a 1% or 10% Annual Exceedance Probability (AEP) event will be directed away from the mobile crushing and screening plant and into a sediment pond. 	As shown in Schedule 1, Figure 2 and Figure 3												
Category 54														
Accommodation Resort WWTP	<ul style="list-style-type: none"> • 200 m³/day MBR containerised modular WWTP • Maintained and operated in accordance with manufacturers specifications • Volumetric flow meters maintained on WWTP outlet to the Irrigation Spray Field • Be able to treat sewage to the following output emissions standards: <table border="0" style="margin-left: 20px;"> <tr> <td>Biochemical Oxygen Demand</td> <td><20 mg/L</td> </tr> <tr> <td>Total Suspended Solids</td> <td><30 mg/L</td> </tr> <tr> <td>Total Nitrogen</td> <td><20 mg/L</td> </tr> <tr> <td>Total Phosphorus</td> <td><3 mg/L</td> </tr> <tr> <td><i>E.coli</i></td> <td><1,000 cfu/100 mL</td> </tr> <tr> <td>Residual free chlorine</td> <td>0.2 – 2.0 mg/L</td> </tr> </table> 	Biochemical Oxygen Demand	<20 mg/L	Total Suspended Solids	<30 mg/L	Total Nitrogen	<20 mg/L	Total Phosphorus	<3 mg/L	<i>E.coli</i>	<1,000 cfu/100 mL	Residual free chlorine	0.2 – 2.0 mg/L	Location and layout as shown in Schedule 1, Figure 2, Figure 4 and Figure 5
Biochemical Oxygen Demand	<20 mg/L													
Total Suspended Solids	<30 mg/L													
Total Nitrogen	<20 mg/L													
Total Phosphorus	<3 mg/L													
<i>E.coli</i>	<1,000 cfu/100 mL													
Residual free chlorine	0.2 – 2.0 mg/L													

Site infrastructure and equipment	Operational requirement	Infrastructure location
	<p>pH 6.5 – 8.5 pH units</p> <ul style="list-style-type: none"> • MBR irrigation tank to cater for 130 m³/day of RO brine for mixing with treated effluent before being co-disposed to the irrigation spray field. 	
Construction Camp WWTP	<ul style="list-style-type: none"> • 50 m³/day SBR WWTP; • Maintained and operated in accordance with manufacturers specifications; • Volumetric flow meters maintained on WWTP outlet to the irrigation spray fields; and • Be able to treat sewage to the following output emissions standards: <ul style="list-style-type: none"> Biochemical Oxygen Demand <20 mg/L Total Suspended Solids <30 mg/L Total Nitrogen <20 mg/L Total Phosphorus <8 mg/L <i>E.coli</i> <1,000 cfu/100 mL Residual free chlorine 0.2 – 2.0 mg/L pH 6.5 – 8.5 pH units • SBR irrigation tank to cater for 34 m³/day of RO brine for mixing with treated effluent before being co-disposed to the irrigation spray field. 	Location and layout as shown in Schedule 1, Figure 2, Figure 4 and Figure 6
Irrigation Field Spray	<ul style="list-style-type: none"> • 13.23 hectares; • Fenced, sign posted and includes a 5 m spray drift buffer; • Irrigation is managed to prevent ponding and pooling of blended wastewater on the ground surface; and • No irrigation generated runoff, spray drift or discharge occurs beyond the boundary of Irrigation Spray Field. 	As shown in Schedule 1, Figure 2 and Figure 4
Irrigation pipeline and RO brine pipeline	Pipelines and conveyance infrastructure must be impermeable and free of leaks or defects	Not shown
RO plants	Flow meters maintained to measure volume of potable water and RO brine produced	Not shown
Category 77		
Concrete Batching Plant	<p>Up to 60 m³/hour mobile silo system consisting of:</p> <ul style="list-style-type: none"> • Enclosed Augers; • Feed Hoppers fitted with level indicators; • Concrete Storage Silos; • Silos equipped with venting filters and overflow protection; and 	As shown in Schedule 1, Figure 2 and Figure 7

Site infrastructure and equipment	Operational requirement	Infrastructure location
	<ul style="list-style-type: none"> • Concrete Transfer Valves <p>Operated in accordance with manufacturer's specifications</p> <p>Maintain the following dust controls:</p> <ul style="list-style-type: none"> • Sand and aggregate will be stored in stockpiles on the ground within the loader operation area, water will be applied via water cart as often as required to minimise dust emissions dust; • Visible observations for dust emissions during unloading of sand or aggregate; • Minimum weekly regular inspection of all filters and/or pressure gauges will be undertaken; • Air cleaning system will be tested at least weekly, and repairs made as necessary; and • Visible observations during filling and delivery will be stopped if product comes out the over pressure valve. <p>Maintain the following stormwater controls:</p> <ul style="list-style-type: none"> • All water used in the concrete batching process or washing of trucks will be collected and recycled back into the plant; • Water collected in the wedge pit will be transferred to a storage tank for reuse onsite; • The wedge pit will not be allowed to dry out except where necessary to remove accumulated material; • Material to be regularly removed to maintain sufficient capacity of the pits/sumps; and • Wash-down sump and the wedge pit will be periodically cleaned to prevent excessive build up and maintain capacity. Settled material will not be allowed to accumulate higher than 30cm below the top of the pit/sump walls. 	

Emissions and discharges

Authorised discharge points for emissions

4. 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
Blended effluent	Sprinklers within the Irrigation Spray Field	As shown in Schedule 1, Figure 4 'Irrigation Spray Field'

Emission limits

5. The licence holder must ensure that blended effluent discharged via irrigation does not exceed the parameter limits specified in Table 5.

Table 5: Irrigation emission limits

Discharge point	Parameter	Discharge limit	Units
Irrigation Spray Field	Total Dissolved Solids	3,500	mg/L
	Total Nitrogen	180	kg/ha/year
	Total Phosphorus	20	kg/ha/year

Monitoring

General

6. The licence holder must ensure that 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.

Discharge point monitoring

7. The licence holder must monitor emissions:
- from each monitoring location;
 - for the corresponding parameter;
 - in the corresponding unit;
 - at the corresponding frequency;
 - for the corresponding averaging period;
 - using the corresponding method,
- as set out in Table 6.

Table 6: Emissions and discharge monitoring

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method
Flow meter at - Accommodation Resort WWTP and Construction Camp WWTP	Volume discharged to Irrigation Spray Field	kL or m ³	Continuous	Cumulative daily	Flow meter device
Flow meter at RO plants	Volume of RO brine to WWTPs				
Final treatment tank sampling tap at: Accommodation Resort WWTP and Construction Camp WWTP	Biochemical Oxygen Demand	mg/L	Quarterly	Spot sample	AS/NZS 5667.1 AS/NZS 5667.10
	Total Suspended Solids	mg/L			
	Total Nitrogen	mg/L			
	Total Phosphorus	mg/L			
	<i>E.coli</i>	cfu/100 mL			
	pH ¹	pH units	Continuous	N/A	
	Residual free chlorine ¹	mg/L	Continuous	N/A	
	Total Dissolved Solids	mg/L	Quarterly	Spot sample	
Brine outlet point at RO Plants	TDS	mg/L	Quarterly	Spot sample	AS/NZS 5667.1

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

8. All sample analysis must be undertaken by laboratories with current NATA accreditation for the relevant parameters, unless other specified in Table 6.

Records and reporting

9. 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:
- the name and contact details of the complainant, (if provided);
 - the time and date of the complaint;
 - the complete details of the complaint and any other concerns or other issues raised; and
 - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

Department of Water and Environmental Regulation

- 10.** The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - 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.
- 11.** The licence holder must submit to the CEO by no later than 60 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 7, and which provides information in accordance with the corresponding requirement set out in Table 7.

Table 7: Annual Environmental Report

Condition	Requirement
1, Table 1 2, Table 2	Summary of any treatment capacity exceedances and any action taken
5, Table 5	Details of any licence limit exceedances observed during the reporting period and any specified actions undertaken to resolve
7, Table 6	Discharge to land monitoring results, including: <ul style="list-style-type: none"> volume (in m³ or kL) of RO brine received to each of the WWTPs, and monthly cumulative volumes presented in table format volume (in m³ or kL) of blended wastewater applied daily to the irrigation spray field, and monthly cumulative volumes presented in table format treated wastewater monitoring data in tabulated and graphical form including the sampling date tabulated quarterly and annual loadings of nitrogen and phosphorus applied to the irrigation spray field, including an explanation of the basis for determining loading rates an assessment and interpretation of the data, including comparison to historical trends and loading limits copies of laboratory sample analysis reports
9	Complaints summary

- 12.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
- the calculation of fees payable in respect of this licence;
 - any maintenance of infrastructure that is performed in the course of complying with condition 3 of this licence;
 - monitoring programmes undertaken in accordance with condition 7 of this licence; and
 - complaints received under condition 9 of this licence.

- 13.** The books specified under condition 12 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.

Definitions

In this licence, the terms in Table 8 have the meanings defined.

Table 8: 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 from 1 July until 30 June of the immediately following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.</i>
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters.</i>
averaging period	means the time over which a limit is measured or a monitoring results is obtained
blended effluent	treated effluent from the WWTPs and RO brine.
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
cfu/100 mL	means colony forming units per 100 millilitres.
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.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
HGPR	High pressure grinding roll

Term	Definition
kg/ha/year	kilograms per hectare per year.
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.
MBR	Membrane Bioreactor.
NATA	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.
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.
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.
RO	Reverse Osmosis.
RO brine	Waste brine with high concentrations of salt as a result of reverse osmosis.
ROM	Run of Mine
SBR	Sequence Batch Reactor.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TDS	Total Dissolved Solids
waste	has the same meaning given to that term under the EP Act.
WWTPs	Wastewater Treatment Plants and refers to the Accommodation Resort WWTP and Construction Camp WWTP.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

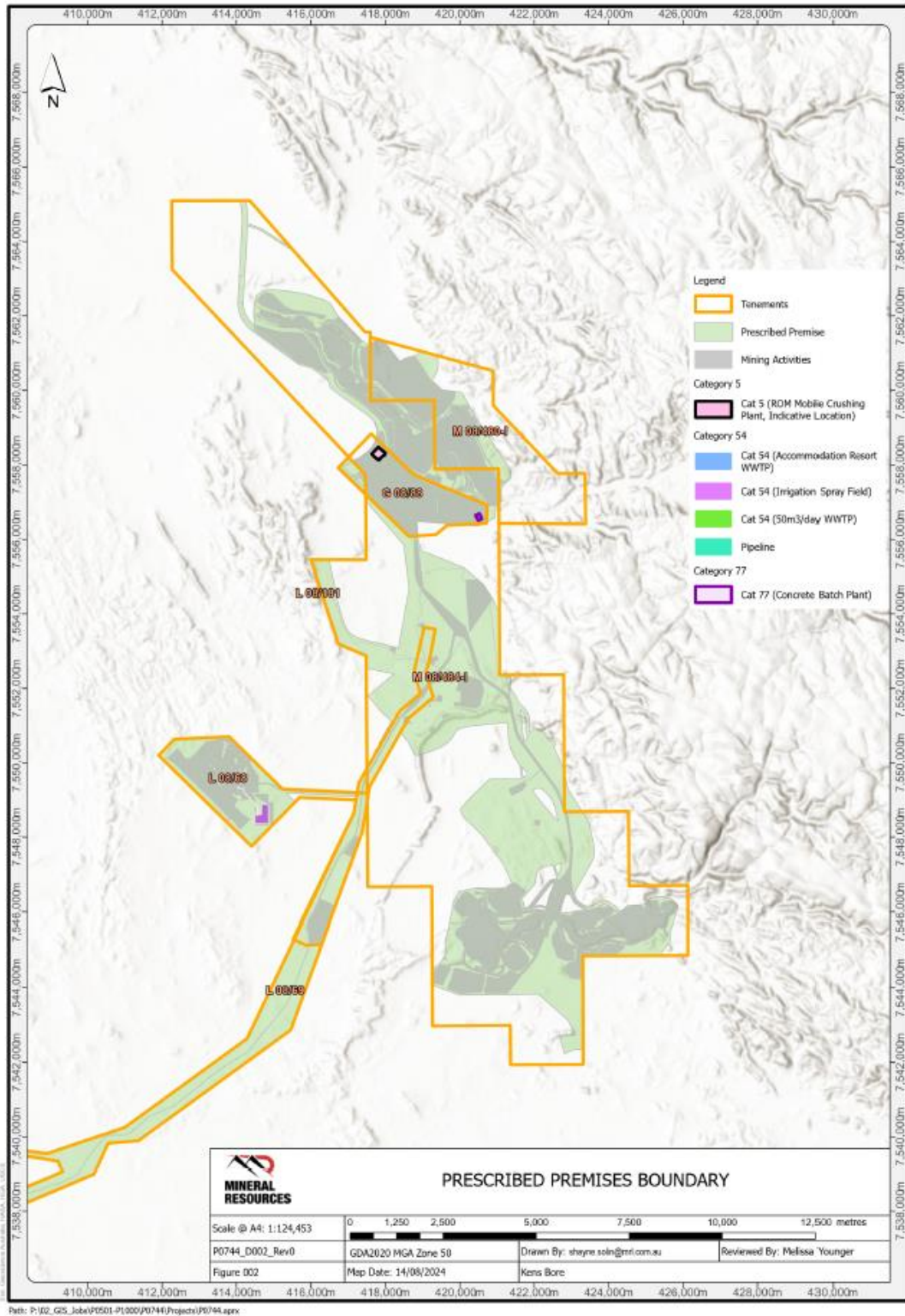


Figure 1: Map of the boundary of the prescribed premises

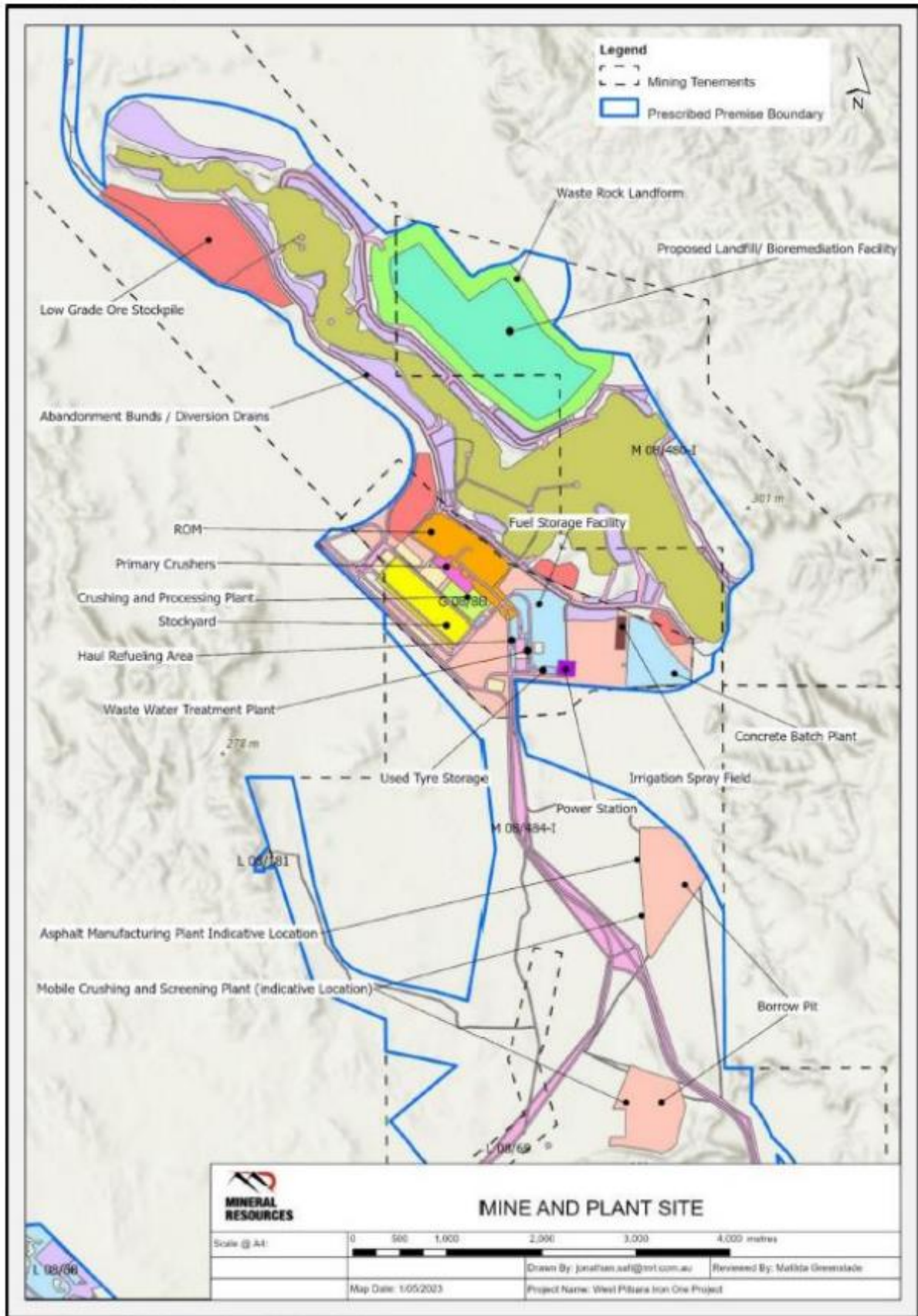


Figure 2: Location of infrastructure (operational and proposed)

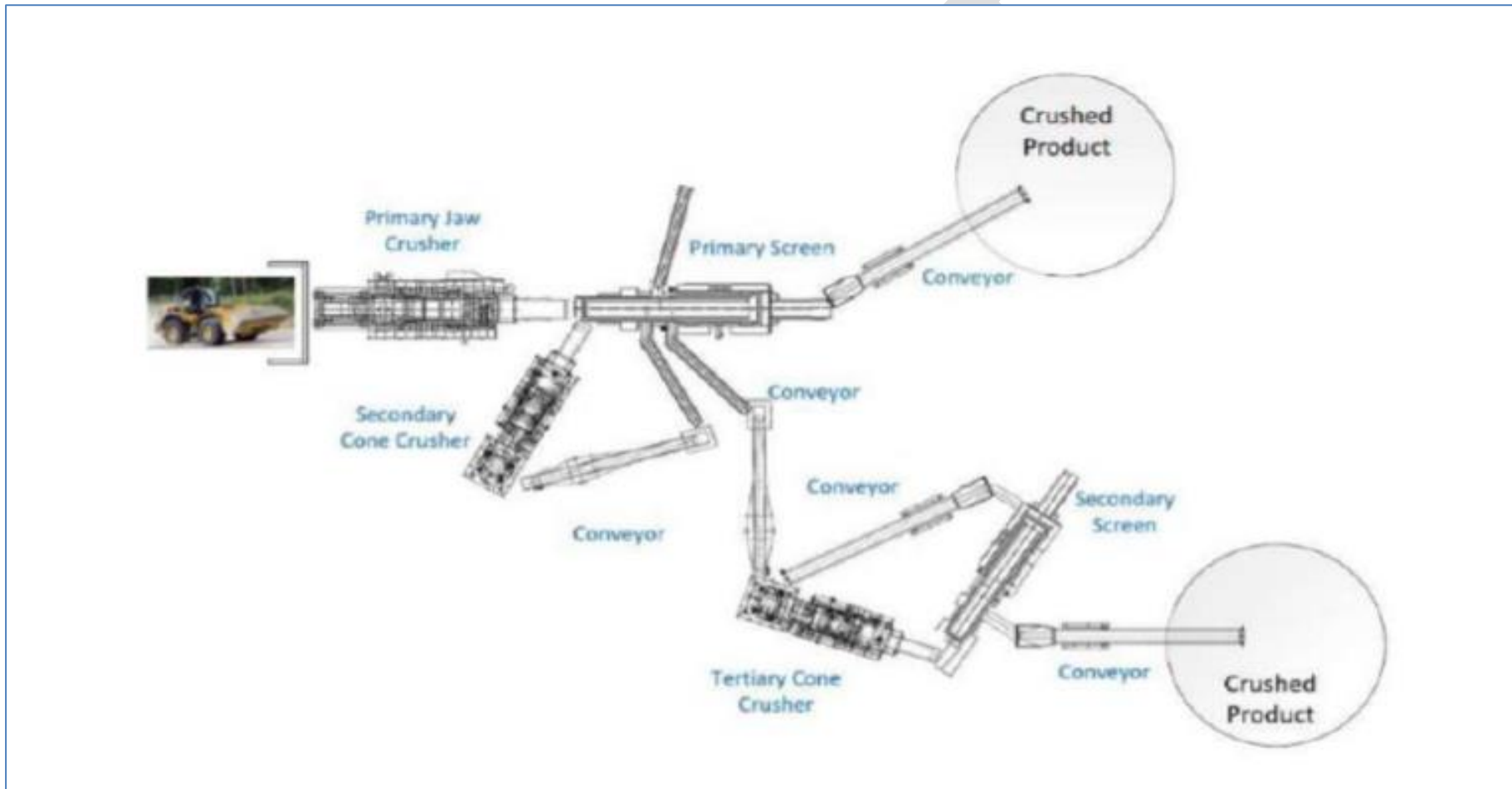


Figure 3: Indicative General Arrangement of the ROM Crushing and Screening Plant

Infrastructure

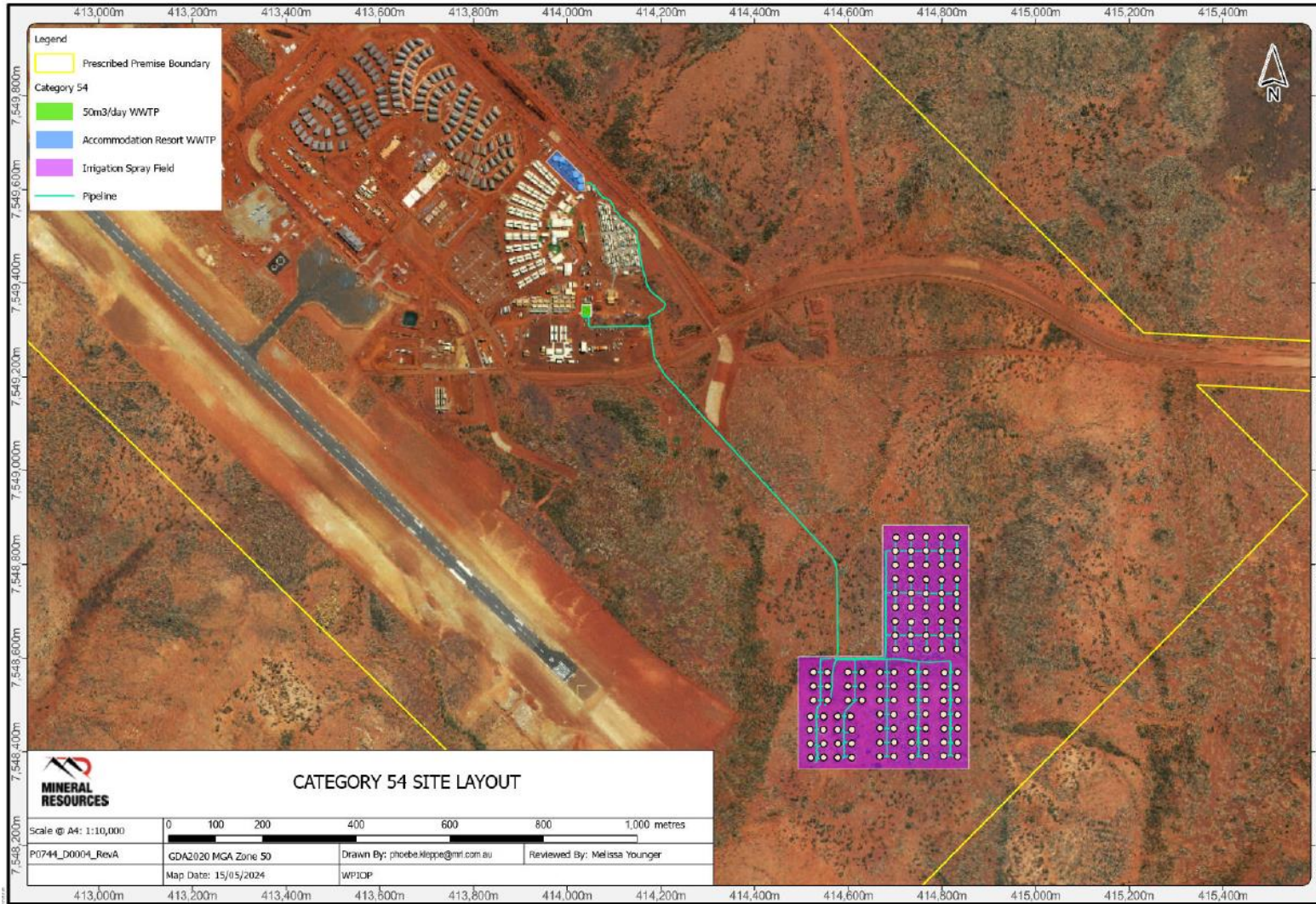


Figure 4: Location of WWTP infrastructure



Figure 5: Layout of Accommodation Resort WWTreatment Plant (200 m³/day)



Figure 6: Layout of Construction Camp WWTP (50 m³/day)

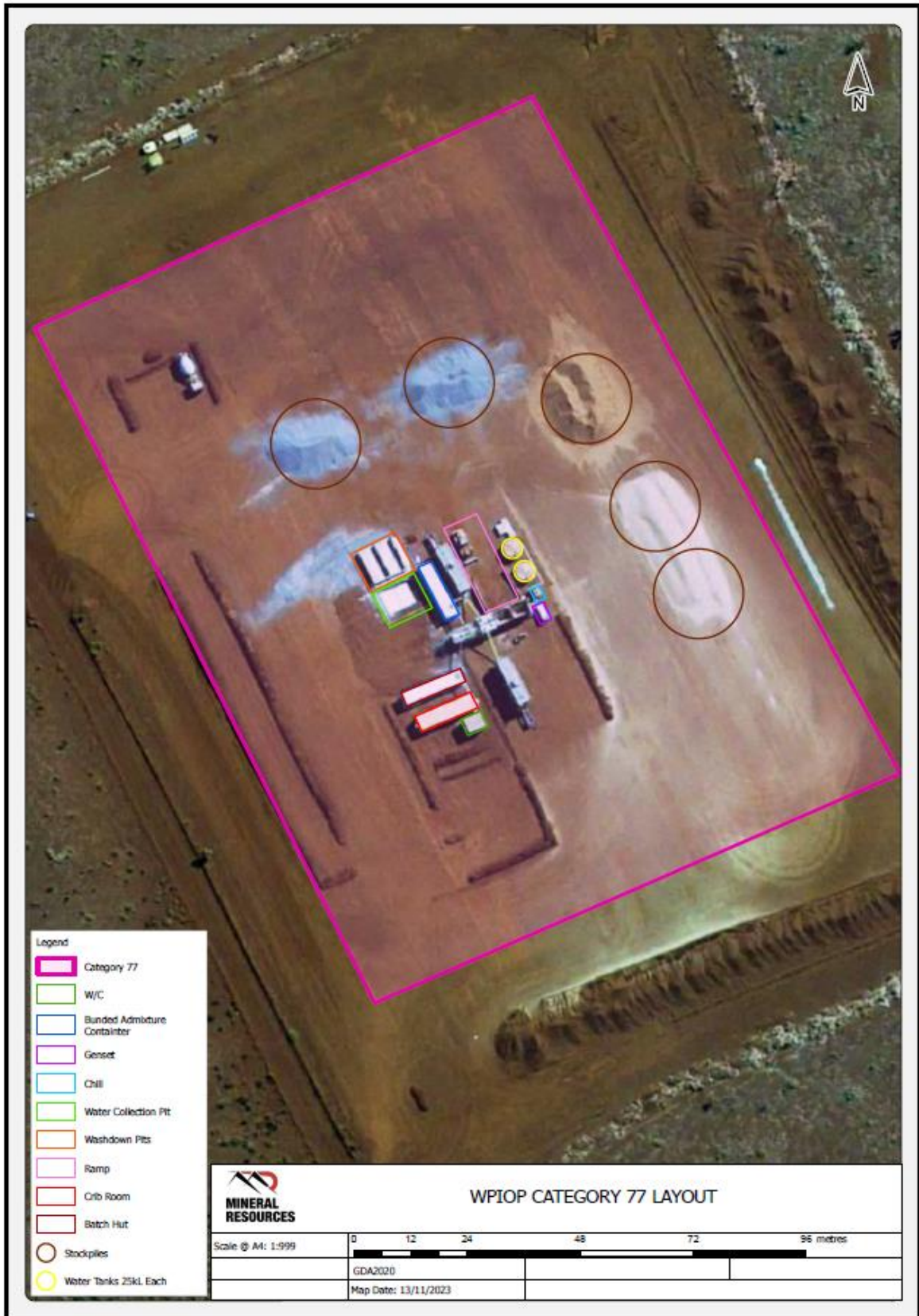


Figure 7: Category 77 Layout