



Licence Number L8788/2013/1

Licence Holder Atlas Iron Limited

ACN 110 396 168

File Number: 2013/003893

Premises Mt Webber DSO Project
Part of M45/1209-1 and L45/280 within coordinates:

| Easting | Northing |
|-----------------|------------------|
| 734895.9 | 7616750.0 |
| 737679.0 | 7616750.0 |
| 737679.0 | 7613541.6 |
| 737024.0 | 7613554.0 |
| 736419.0 | 7612794.0 |
| 735812.3 | 7612795.7 |
| 735717.0 | 7613029.0 |
| 734860.0 | 7613029.0 |

NULLAGINE WA 6758

Date of Amendment 15/05/2018

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Date signed: 15 May 2018

Danielle Eyre

Senior Manager, Industry Licensing (Resource Industries)

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

Definitions and interpretation

Definitions

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

Table 1: Definitions

| Term | Definition |
|-------------------------------|---|
| ACN | Australian Company Number |
| Amendment Notice | refers to this document |
| Atlas | Atlas Iron Limited |
| AHD | Australian Height Datum |
| Category/ Categories/ Cat. | categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations |
| CEO | means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au |
| Delegated Officer | an officer under section 20 of the EP Act |
| Department | means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act. |
| DWER | Department of Water and Environmental Regulation |
| EPA | Environmental Protection Authority |
| EP Act | <i>Environmental Protection Act 1986 (WA)</i> |
| EP Regulations | <i>Environmental Protection Regulations 1987 (WA)</i> |
| Existing Licence | The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review |
| m | metres |
| Licensee | Atlas Iron Limited |
| Licence Holder | Atlas Iron Limited |

| | |
|---------------------|--|
| Occupier | has the same meaning given to that term under the EP Act. |
| Prescribed Premises | has the same meaning given to that term under the EP Act. |
| Premises | refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report. |
| Risk Event | as described in <i>Guidance Statement: Risk Assessment</i> |

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the existing Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment for Category 89 and change of premises boundary. No changes to the aspects of the existing Licence relating to Categories 5 or 54 have been requested by the Licensee.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment description

The Licence Holder, Atlas Iron Limited (Atlas) (the Licensee) submitted an application to amend the Licence on 26 February 2018. Atlas proposes to establish a new tyre disposal area in the Ibanez Stage 4 backfill (located as shown in Figure 1 below).

The tyres will be placed at the base of the pit on 334 RL and covered as the backfill advances. The final RL of the backfill will be 352 metres (m) AHD. Up to 130 tyres will be buried per year.

The current tyre disposal area will not remain in operation and it will be fully encapsulated.

The Ibanez Stage 4 backfill is outside the prescribed premises boundary of the existing licence, and a new boundary is proposed as shown in Figure 2 below.

Other approvals

The Licensee has provided the following information relating to other approvals which are relevant to this amendment, as outlined in Table 2.

Table 2: Relevant approvals

| Legislation | Approval |
|------------------------|--|
| <i>Mining Act 1978</i> | Mining Proposal Reg. ID 71393 approved 2/02/2018 – Ibanez In-Pit Waste Rock Disposal (Stage 4) |

Amendment history

Table 3 provides the amendment history for L8788/2013/1.

Table 3: Licence amendments

| Instrument | Issued | Amendment |
|--------------|------------|--|
| L8788/2013/1 | 27/03/2014 | New Licence for Categories 54 and 89. |
| L8788/2013/1 | 3/07/2014 | Licence amendment to include Category 5, Category 12 and the MOC WWTP. |

| | | |
|--------------|-----------------------|---|
| L8788/2013/1 | 05/02/2015 | Licence amendment to change monitoring frequency of the WWTP. |
| L8788/2013/1 | 11/02/2016 | Licence amendment to include tyre disposal at waste rock dump and remove Category 12. |
| L8788/2013/1 | 29/04/2016 | Notice of Amendment by administrative notice to extend duration of the Licence to 30 March 2030. |
| L8788/2013/1 | 31/03/2017 | Amendment Notice 1 to increase assessed production capacity to 9,000,000 tonnes per annum. |
| L8788/2013/1 | 01/11/2017 | Amendment Notice 2 for administrative changes and to update the prescribed premises boundary. |
| L8788/2013/1 | This Amendment Notice | Amendment Notice 3 for a new tyre disposal area in the Ibanez Stage 4 backfill and change of premises boundary. |

Location and receptors

The Mount Weber DSO Project is located within the Shire of East Pilbara approximately 170 km south-southeast of Port Hedland, and 60 km southwest of Marble Bar.

Table 4 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 4: Sensitive land users

| Residential and sensitive premises | Distance from Prescribed Premises |
|------------------------------------|---|
| Pilaga Homestead | 15 km northwest of the premises boundary. |

Table 5 below lists the relevant environmental receptors within 10 km relevant to the proposal.

Table 5: Environmental receptors

| Environmental receptors | Location from the activity |
|--|---|
| Threatened fauna (several species) | Identified approximately 1 km north |
| Shaw River | Approximately 4.8 km east |
| Tambina Creek tributary of Shaw River | Approximately 6.8 km south of the premises |
| Minor non perennial water courses | Within the premises boundary |
| Groundwater considered fresh to saline. Used on site as potable water after reverse osmosis. | Approximately 20 metres below ground level (mbgl) |
| Pilbara Groundwater Management Area | Premises is located within the proclaimed area. |
| Pilbara Surface Water Area | Premises is located within the proclaimed area. |

Figure 1: Proposed tyre dump location – Ibanez Stage 4 backfill

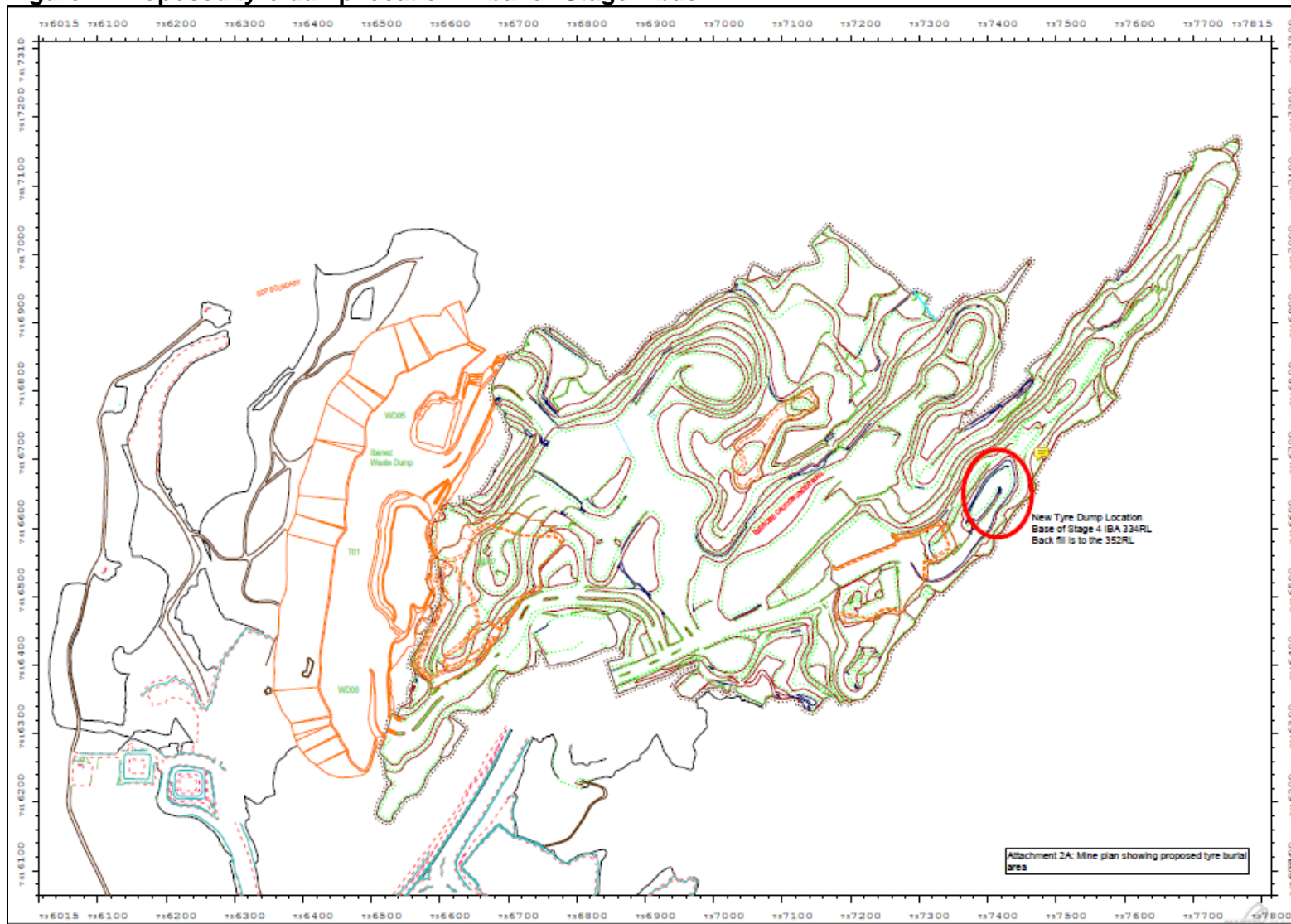
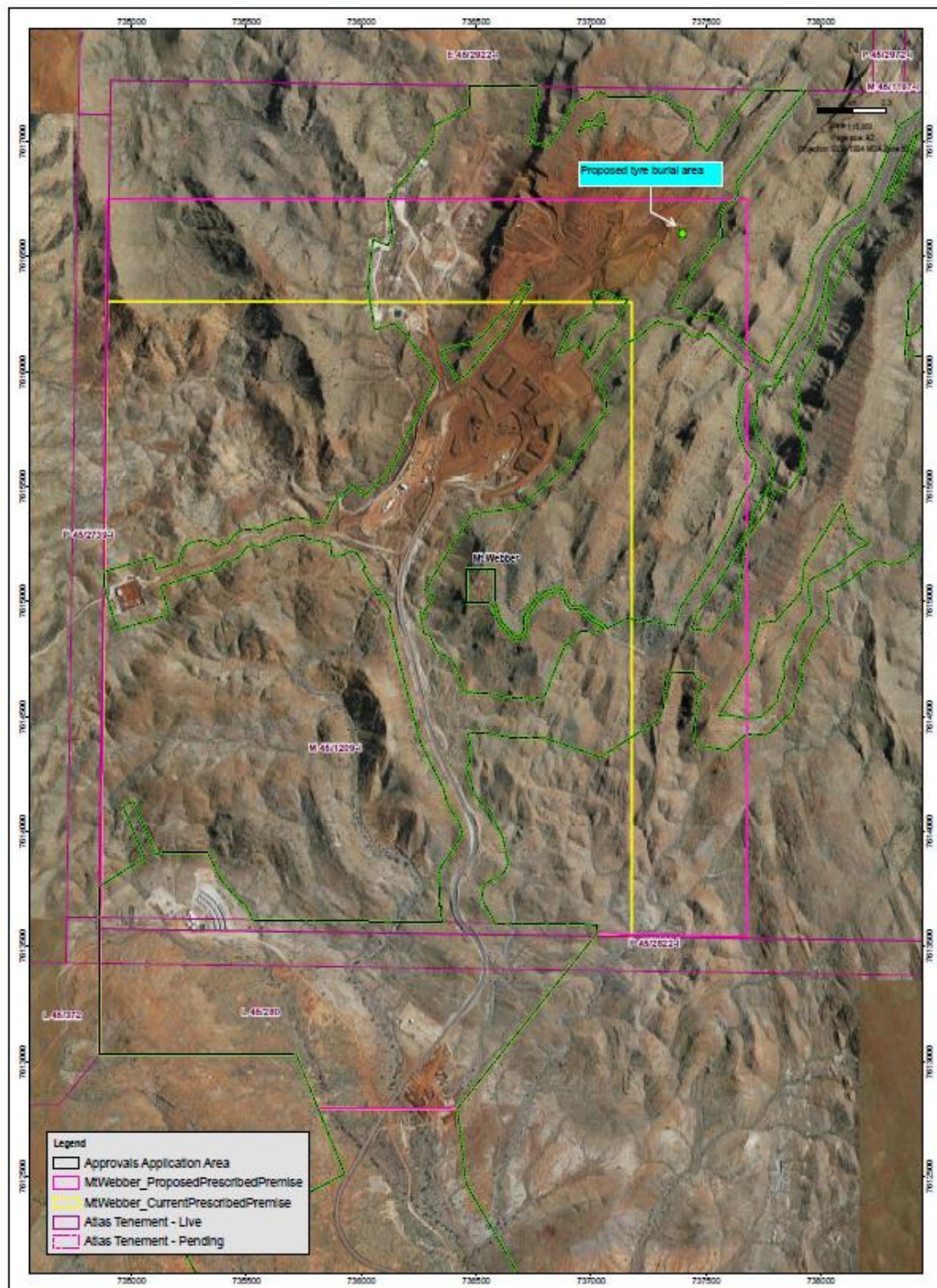


Figure 2: Proposed premises boundary and tyre burial area

The premises boundary in the existing licence is drawn in yellow and the proposed boundary is drawn in pink.



Risk assessment

Table 6 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 6: Risk assessment for proposed amendments during operation

| Source/Activities | | Risk Event | | | | Consequence rating | Likelihood rating | Risk | Reasoning |
|--|--|--|--|--|--|---|---|--|---|
| | | Potential emissions | Potential receptors | Potential pathway | Potential adverse impacts | | | | |
| Cat 89: Putrescible landfill site | Burial of tyres at Ibanez Stage 4 Backfill | Dust from machinery associated with burial of tyres | Pilaga Homestead - 15 km from the premises. | Air/wind dispersion | Health and amenity impacts | Slight Minimal impact | Rare The risk event may only occur in exceptional circumstances | Low | Distance to the closest sensitive land use. |
| | | Noise from machinery associated with burial of tyres | | | Amenity impacts | | | | |
| | | Tyre fire – particulate matter and toxic air emissions | Pilaga Homestead - 15 km from the premises, and transient people and fauna in the path of the smoke plume. | Air/wind dispersion | Amenity impacts Health impacts. | Minor Minor off-site impacts at a local scale | Rare The risk event may only occur in exceptional circumstances | Low | |
| | | Tyre fire – contaminated fire water. | Surface water | Land and surface water courses | Contamination of soils. Disruption of riparian ecology. | Minor Minor off-site impacts at a local scale | Rare The risk event will probably not occur in most circumstances | Low | |
| | | Groundwater | Infiltration through ground | Contamination of groundwater considered fresh to saline. | Moderate Mid-level on site impacts | Rare The risk event may only occur in exceptional | Medium | Depth to groundwater is greater than 20 metres below ground level. <u>Applicant's controls</u> include: | |

| | | | | | | | | |
|--|--|--|--|--|--|--|---------------|---|
| | | | | | | | circumstances | <ul style="list-style-type: none"> • Tyres will be placed at the base of the pit and covered as backfill advances. • Heavy tyres will be stacked no more than 3 tyres high and small tyres stacked in large ones where possible. • Maximum 130 tyres buried/year. • Fire control equipment (water cart) shall have suitable access to the tyre disposal area at all times. <p><u>Existing Licence controls:</u></p> <ul style="list-style-type: none"> • Condition 1.3.1 requires a limit of 500 tonnes per year of all landfill types to be accepted for landfill. • Condition 1.3.3 requires: <ul style="list-style-type: none"> ◦ tyres to be buried in batches separated from each other by at least 100 mm of soil, ◦ no more than 40m³ of tyres reduced to pieces or batches of 1,000 whole tyres. ◦ All other landfill waste to be buried at the site's current landfill. • Condition 1.3.7 requires tyres to be covered by soil to a depth of at least 500m as soon as practical. |
|--|--|--|--|--|--|--|---------------|---|

Decision

The Delegated Officer considers the operation of the new tyre disposal area and the extension of the premises boundary will not result in emissions that are unacceptable to public health or the environment, and has determined the following changes to the existing Licence are made.

New tyre Disposal Area

Conditions 1.3.1, 1.3.3 and 1.3.7 of the existing Licence capture emissions relating to fire smoke and fire water, are applicant controls and remain applicable. Additional applicant controls assessed as reducing likelihood and consequence of the risk event are added to the Licence (*Guidance Statement: Risk Assessments*).

Condition 3.1.10 for construction of previous tyre disposal area is redundant and is removed.

Premises boundary

The premises boundary has been extended to include the tyre disposal area.

Definitions

Definitions have been updated.

Licensee comments

The Licensee was provided with the draft Amendment Notice on 9 May 2018. The Licensee had no comments, and waived the 21 day consultation period.

Amendment

1. The Prescribed Premises address is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below.

Mt Webber DSO Project

Part of M45/1209 and L45/280

Within coordinates ~~E734860 N7613029; E734895.9 N7616304; E737177.8 N7616303; E737177.6 N7613542; E737024 N7613554; E736419 N7612794; E735812.3 N7612796; and E735717 N7613029~~

| <u>Easting</u> | <u>Northing</u> |
|-----------------|------------------|
| <u>734895.9</u> | <u>7616750.0</u> |
| <u>737679.0</u> | <u>7616750.0</u> |
| <u>737679.0</u> | <u>7613541.6</u> |
| <u>737024.0</u> | <u>7613554.0</u> |
| <u>736419.0</u> | <u>7612794.0</u> |
| <u>735812.3</u> | <u>7612795.7</u> |
| <u>735717.0</u> | <u>7613029.0</u> |
| <u>734860.0</u> | <u>7613029.0</u> |

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2. Definitions of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold underlined text shown in underline below:

‘CEO’ for the purposes of notification means;

Director General
 Department Administering the EP Act
 Locked Bag 33 Cloisters Square
 PERTH WA 6850
~~info-der@dwer.wa.gov.au~~; **info@dwer.wa.gov.au**

3. Condition 1.3.3 Table 1.3.2 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold underlined text shown in underline below:

| Table 1.3.2: Waste processing | | |
|---|--|---|
| Waste type | Process | Process limits |
| Sewage | Biological, physical and chemical treatment | Treatment of sewage waste shall be targeted at or below the treatment capacity of 119m ³ /day. |
| Inert Waste Type 1 Putrescible Waste Clean Fill Inert Waste Type 2 | Receipt, handling and disposal of waste by landfilling | <p>All waste types with the exception of tyres Disposal of waste by landfilling shall only take place within the landfill area shown on the Landfill Map in Schedule 1</p> <p>The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2 m.</p> |
| Inert Waste Type 2 (Tyres only) | | <p>Inert Waste Type 2 - Tyres only Disposal of tyres by landfilling shall only take place within the tyre disposal area at the <u>Ibanez Stage 4 backfill</u> waste rock landform shown on the Tyre Disposal map <u>'Landfill and tyre burial area' map</u> in Schedule 1.</p> <p><u>Heavy vehicle tyres shall be stacked no more than three tyres high.</u></p> <p><u>Tyres shall be placed at the base of the pit and covered as backfill advances.</u></p> <p>Tyres shall only be landfilled:</p> <ul style="list-style-type: none"> i) in batches separated from each other by at least 100mm of soil and each consisting of not more than 40m³ of tyres reduced to pieces; or ii) in batches separated from each other by at least 100mm of soil and each consisting of not more than 1,000 whole tyres. |

4. The Licence is amended by the deletion of the following Condition 1.3.10 as shown in strikethrough below:

~~1.3.10 The Licensee shall construct the tyre disposal area in accordance with the documentation listed in Table 1.3.4.~~

| Table 1.3.4: Construction requirements¹ Documentation | Parts | Date of Document |
|---|------------------|-----------------------------|
| Mt Webber Direct Shipping Ore (DSO) Application to Amend Operating Licence L8788 supporting documentation, 132-LAH-EN-REP-0027, Atlas Iron Limited | All | 2 November 2015 |

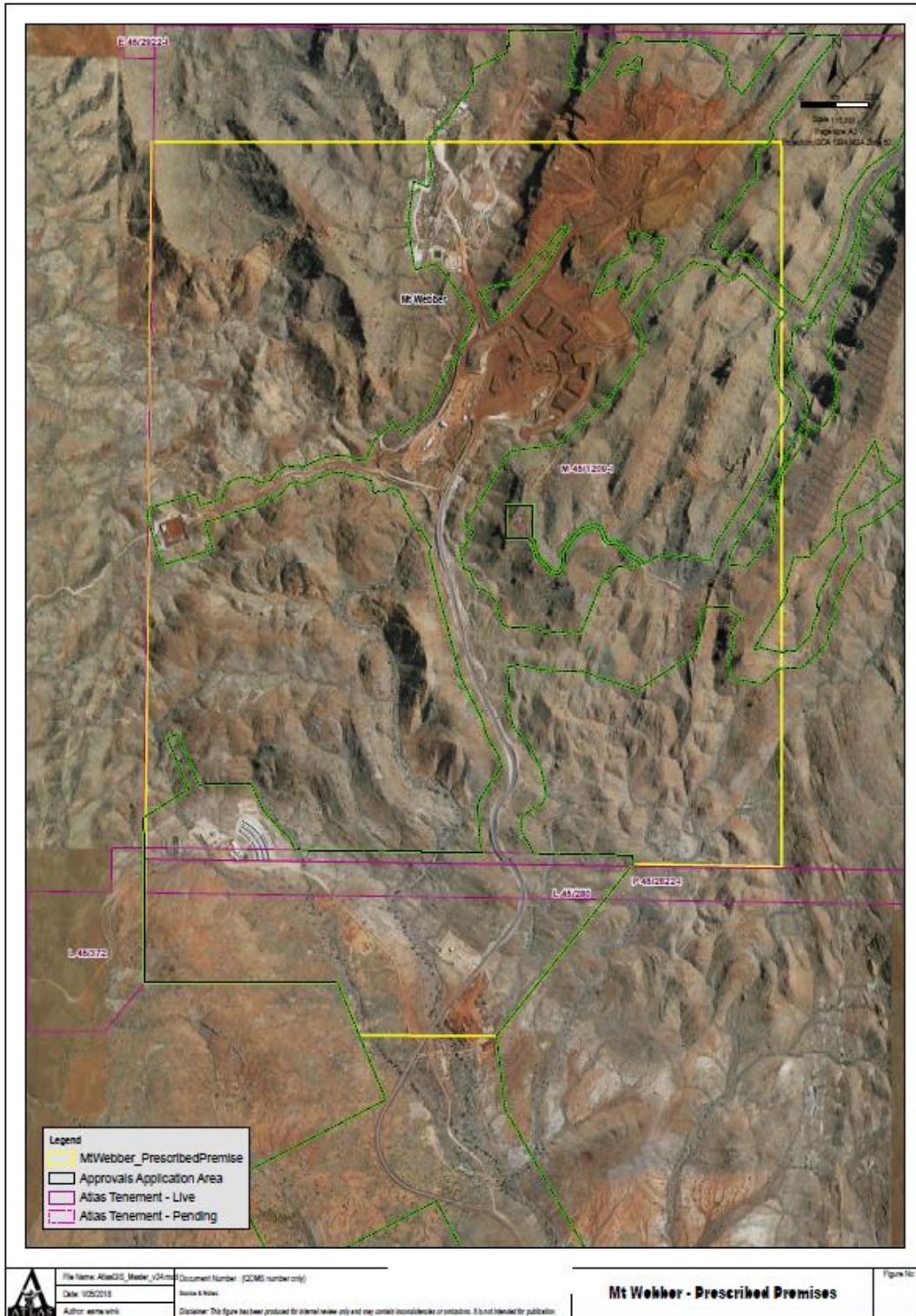
~~Note 1: Where the details and commitments of the documents listed in condition 1.3.10 are inconsistent with any other condition of this licence, the conditions of this licence shall prevail.~~

5. The Premises Map in Amendment Notice 2 is deleted and replaced with the Premises map in Attachment 1 in this Amendment Notice.
6. The Licence is amended by the deletion of the 'Landfill map' and the 'Tyre disposal map' in Schedule 1, and replaced with the 'Landfill and tyre disposal map' as shown in Attachment 1 of this Amendment Notice.

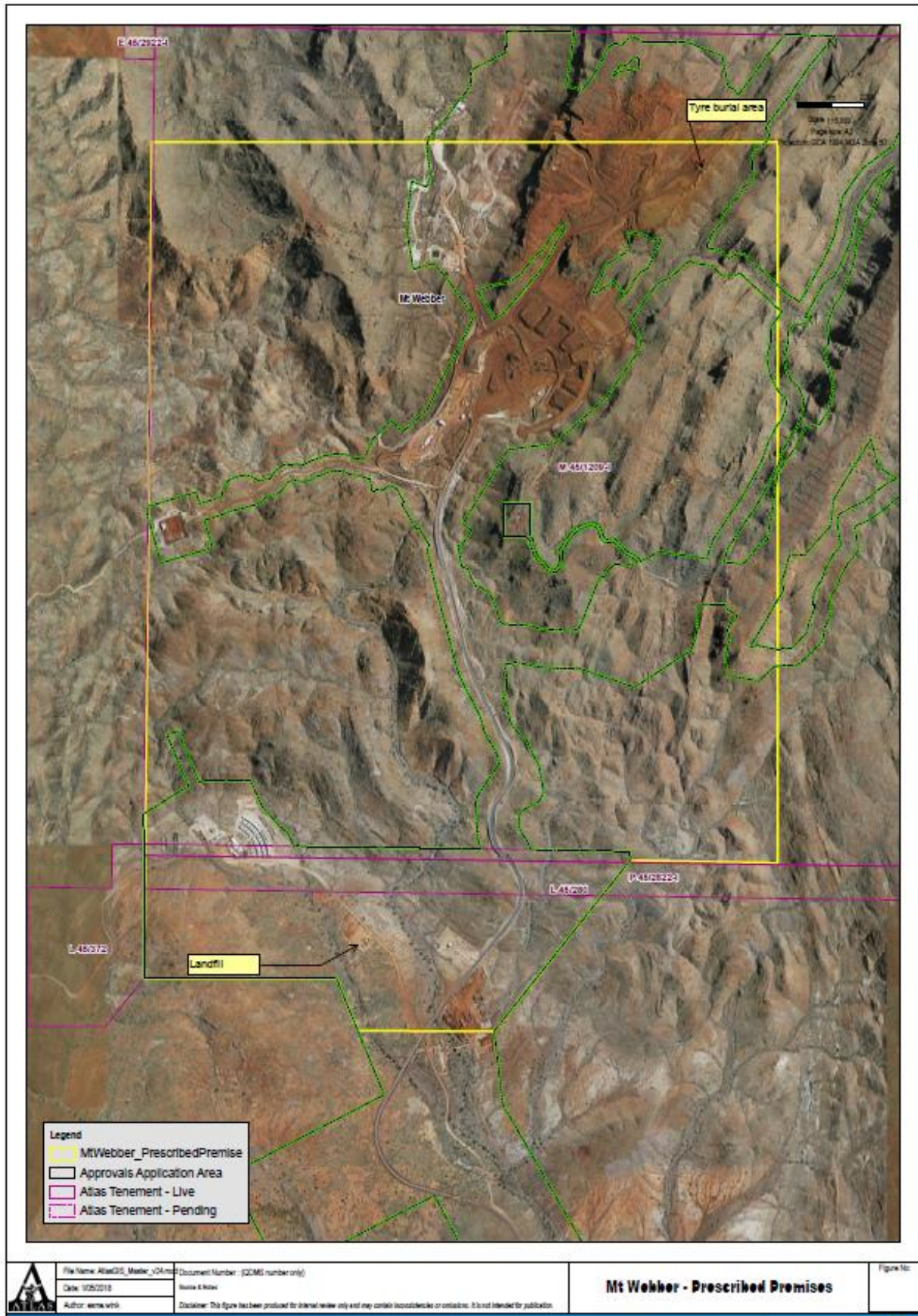
Attachment 1

Premises map

The yellow line depicts the Premises boundary.



Landfill and tyre burial area map



Appendix 1: Key documents

| | Document title | In text ref | Availability |
|---|--|--|--|
| 1 | Licence L8788/2013/1 – Mt Webber DSO Project and Amendment Notices 1 and 2. | L8788/2013/1 | Accessed at www.dwer.wa.gov.au |
| 2 | Atlas Iron - Mt Webber - L8788 Licence Amendment Application – Tyre Burial, received from Esme Wink (Atlas Iron), 26/02/2018 | Application | DWER records (A1624860) |
| 3 | <i>Guidance Statement: Decision Making</i> , Department of Environment Regulation, February 2017 | <i>Guidance Statement: Decision Making</i> | Accessed at www.dwer.wa.gov.au |
| 4 | <i>Guidance Statement: Risk Assessments</i> , Department of Environment Regulation, February 2017 | <i>Guidance Statement: Risk Assessments</i> | |
| 5 | <i>Guidance Statement: Setting Conditions</i> , Department of Environment Regulation, October 2015 | <i>Guidance Statement: Setting Conditions</i> | |
| 6 | <i>Guidance Statement: Environmental Siting</i> Department of Environment Regulation, November 2016 | <i>Guidance Statement: Environmental Siting</i> | |
| | <i>Guidance Statement: Regulatory Principles</i> , Department of Environment Regulation, July 2015 | <i>Guidance Statement: Regulatory Principles</i> | |