



Application to amend licence

Part V Division 3 of the *Environmental Protection Act 1986*

Licence number	L5258/1991/11
Applicant	Pilbara Iron Company (Services) Pty Ltd
ACN	107 210 248
DWER file number	DER2013/000902-1~4
Premises	Mt Brockman, Nammuldi and Silvergrass Iron Ore Mines AML70/4, ALM70/272, G47/01242, G47/01243, L47/140, L47/388, L47/141, L47/647, LGE G848898, LG848907 and LPL N050438 within co-ordinates: E535363 N7536177; E 544071 N7257202; E553417 N7525629; E548757 N7517535; E538693 N7517627; E531400 N7517644; E527723 N7519096 and E525753 N7531802 MT SHEILA WA 6751
Date of report	15 May 2020
Status of Report	FINAL

1. Definitions

Key terms relevant to this decision report and their associated definitions are listed in Table 1.

Table 1: Definitions

Term	Definition
annual period	a 12 month period commencing from 1 January until 31 December in the same year
applicant	Pilbara Iron Company (Services) Pty Ltd
category / categories	Categories of prescribed premises as set out in Schedule 1 of the EP Regulations.
decision report	refers to this document.
Delegated Officer	An officer delegated under section 20 of the EP Act.
department	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 As of 1 July 2017, the Department of Environment Regulation (DER), the Office of the Environmental Protection Authority (OEPA) and the Department of Water (DoW) amalgamated to form the Department of Water and Environmental Regulation (DWER). DWER was established under section 35 of the <i>Public Sector Management Act 1994</i> and is responsible for the administration of the <i>Environmental Protection Act 1986</i> along with other legislation.
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>
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
licence holder	Pilbara Iron Company (Services) Pty Ltd
prescribed premises	This 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

2. Overview of premises

2.1 Classification of Premises

Table 2: Classification of premises and assessed design capacity

Category	Description	Assessed production or design capacity or throughput
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; (b) Tailings from metallic or non-metallic ore are reprocessed; ore (c) Tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam	68,000,000 tonnes per annual period
Category 6	Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	42,300,00 tonnes per annual period
Category 12	Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	10,000,000 tonnes per annual period
Category 54	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.	526 cubic metres per day
Category 64	Class II or III putrescible landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the Landfill Waste Classification and Waste Definitions 1996, is accepted for burial.	7,634 tonnes per annual period
Category 73	Bulk storage of chemicals, etc.: premises on which acids, alkalis or chemicals that – (a) Contain at least one carbon to carbon bond; and (b) Are liquie at STP (standard temperature and pressure), are stored	20,260 cubic metres

2.2 Description of proposed activity

Pilbara Iron Company (Services) Pty Ltd (Pilbara Iron) has applied for an amendment to extend licence L5258/1991/11 for the Mt Brockman, Nammuldi and Silvergrass Iron Ore Mines, located approximately 60 kilometres north-west of the town of Tom Price, Shire of Ashburton, in the Pilbara.

Pilbara Iron was issued licence L5258/1991/11 under the *Environmental Protection Act 1986* on 26 May 2011 for the Mt Brockman, Nammuldi and Silvergrass Iron Ore Mines. Ministerial Statement 925 allowed an expansion of the original Nammuldi-Silvergrass Iron Ore Project of November 2000, with the production rate increased to approximately 45 million tonnes per year over a project life of 17 to 20 years by widening and deepening Marra Mamba pits at both Nammuldi and Silvergrass mine sites, and mining bedded Brockman ore at Nammuldi.

Mining is both above and below the water table. There has also been accompanying increases in the capacity, and relocation of processing facilities and transport infrastructure, and an increase in dewatering to access ore below the water table. On 17 June 2015 the removal of the limit on production was approved via Ministerial Statement 925.

As there will be no change in activities relating to the current licence, the risk rating has not changed and therefore a re-assessment of risk at this time is not deemed necessary.

It should be noted that the Nammuldi Fixed Plant WWTP has had elevations in some parameters (particularly Total Nitrogen) however, the following measures have been implemented and there are improvements in monitoring results:

1. Increase the rest cycle in the air blower settings allowing for longer periods of anaerobic conditions to support de-nitrification and removal of Total Nitrogen and Total Phosphorus.
2. Installation of Aluminum Sulphate flocculants dosing system to assist with removal of Total Nitrogen and Total Phosphorus.

3. Consolidation of licence

As part of this amendment package DWER has consolidated the licence by incorporating changes made under the following Amendment Notices:

- Amendment Notice 1, granted 18 October 2016– construction of a fuel storage facility, waste dump landfill, primary crusher and conveyor at the Silvergrass East (SGE) Project adjacent to Brockman 2 Nammuldi;
- Amendment Notice 2, granted 01 June 2017 - construction of a new Brockman 2 mine (B2) putrescible landfill to replace the existing putrescible landfill which is to be decommissioned; and
- Amendment Notice 3, granted 24 January 2019 - construction of a new crushing and screening plant and replacement of the Nammuldi Fixed Plant Wastewater Treatment Plant (WWTP).

The obligations of the licence holder have not changed in consolidating the licence. DWER has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- Updated the format and appearance of the licence;
- Deleted the redundant AACR form set out in schedule 1 of the previous licence and advise the licence holder to obtain the form from the Department's website;
- Revised licence condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and
- Corrected clerical mistakes and unintentional errors.

Previously issued Amendment Notices will remain on the DWER website for future reference and will act as a record of DWER's decision making.

4. Legislative context and other approvals

The legislative framework for this assessment is the *Environmental Protection Act 1986* (EP Act) and *Environmental Protection Regulations 1987* (EP Regulations).

Relevant guidance documents are outlined in Appendix 1: Key documents.

Approvals relevant to the premises are outlined in Table 3 below.

Table 3: Relevant approvals to the premises

Legislation	Number	Approval
Part IV of the <i>Environmental Protection Act 1986</i> 11 January 2013	Ministerial Statement 925	The proposal includes the existing Nammuldi-Silvergrass Iron Ore Project and the proposed expansion, located approximately 60 kilometres north-west of the town of Tom Price, Shire of Ashburton, in the Pilbara region.
Part IV of the <i>Environmental Protection Act 1986</i> 17 June 2015	Ministerial Statement 925	Above water table extensions to authorised Pits 11-13 at Nammuldi and Pit 1 at Silvergrass; <ul style="list-style-type: none"> • Additional clearing of 400ha of native vegetation for pits and dumps; • Retention of the existing (original) processing plant at Nammuldi; • Removal of the limit on production; and • Expansion of the development envelope.

5. Consultation

Method	Comments received	DWER response
Applicant referred draft documents (24/04/2020)	Licence expiry date The licence holder requests the expiry date be extended for a 10 year period. The administrative burden of a two year expiry is considerable for both parties and given there is no change to the environmental risk from the Prescribed Premises, the Licensee requests the expiry be extended for a 10 year period. All tenure covered by the Prescribed Premises have long lead times and are captured by an extensive notification process far in advance of expiry dates to ensure tenure does not lapse.	Updated to five years based on planning approvals.
	Prescribed Premises assessed production / design capacity. The licence holder requests the assessed production capacity for Category 64 and Category 73 be updated. The licence holder notes that both Category 64 and 73 require updating as per Amendment Notice 1 dated 18th October 2016 to the following:	Updated as requested.

	<ul style="list-style-type: none"> • Category 64: to be updated from 5,114 tonnes per annual period (tpa) to 7,634 tpa; and • Category 73: to be updated from 18,740 cubic metres to 20,260 cubic metres. 	
	<p>Condition 4: Wastewater treatment plants monitoring</p> <p>The licence holder requests pH be updated such that In-field non-NATA accredited analysis be permitted.</p> <p>The parameter pH has a very short holding time i.e. properties can change markedly for this test method. Therefore the accuracy of the results by the time they arrive at the laboratory will be false. The Licensee requests In-field non-NATA accredited analysis be permitted.</p>	Updated as requested.
	<p>Condition 7: Waste fines storage facility groundwater monitoring</p> <p>The licence holder requests EC be updated such that In-field non-NATA accredited analysis be permitted.</p> <p>The licence holder requests In-field non-NATA accredited analysis be permitted to align with what has been approved at other sites to date, for example Marandoo Iron Ore Mine Part V L6869/1992.</p>	Updated as requested.
	<p>Condition 9: Waste management from ancillary operations</p> <p>The licence holder requests “immediately recover” be replaced with “as soon as practicable”.</p> <p>As soon as practicable allows time for the assessment of health and safety risks prior to the commencement of clean-up efforts and ensures accessibility to the work area.</p>	Updated as requested.
	<p>Condition 25: Management of Special Waste Type 2</p> <p>The licence holder requests Column 1 of Table 3 be updated to reflect Special Waste Type 1.</p> <p>The licence holder requests reference to a “minimum depth of one metre cover” be removed or amended to align with condition 18.</p> <p>The licence holder notes Special Waste Type 2 pertains to Medical Waste and requests this be updated to reflect Special Waste Type 1 (asbestos) which has disposal requirements outlined in Column 2.</p> <p>Volumes of this waste generated are small (typically <math><1\text{m}^3</math>) and hence covering these wastes with the proposed minimum defined cover may limit landfill capacity.</p>	Updated to 300 mm consistent with other licenses.
	<p>Condition 26</p> <p>The licence holder requests this condition be removed or replaced.</p> <p>The licence holder requests this condition be removed or replaced with a condition requiring the licence holder to “treat all hydrocarbon impacted waters via an oily water separator prior to discharge”.</p>	Updated as requested for onsite discharge.

	<p>Treated water may at times be discharged onsite, stored for evaporation or reused through process flows. Further, inflows through these treatment systems can vary based on high and low demand periods. In addition, where treated water is discharged (i.e. dust suppression) it occurs at locations away from sensitive environments and at flows that prevent pooling and infiltration to soils.</p> <p>The licence holder notes condition 6 requires waters discharged from the premises do not exceed 30 mg/L and considers this to be more protective for the environment.</p>	
	<p>Condition 31</p> <p>The licence holder requests condition 31, part c be updated to:</p> <p>(c) six monthly monitoring is undertaken at least 4 months apart.</p> <p>The licence holder requests this period be broadened to “4 months” to consider operational and personnel matters such as:</p> <ul style="list-style-type: none"> • safe access following rainfall or mining activities which can see areas inaccessible for prolonged periods of time, and • statutory leave entitlements, typically one month in duration. 	<p>Updated as requested.</p>
	<p>Condition 33</p> <p>The licence holder requests condition 33 be updated to remove reference to the 120 day reference and be replaced with “30 April each year after....”</p> <p>The licence holder notes the “120 day” reference would result in alternate reporting dates during leap years and requests this text be amended or replaced with “30 April each year after....”</p>	<p>Updated as requested.</p>
	<p>Condition 34</p> <p>The licence holder requests Condition 34, part b be updated as per the requested change in condition 33.</p> <p>The licence holder notes the “120 day” reference would result in alternate reporting dates during leap years and requests this text be amended or replaced with “30 April each year after....”</p>	<p>Updated as requested.</p>
	<p>Table 5: Definitions</p> <p>The licence holder requests the addition of Special Waste Type 1.</p>	<p>Special Waste Type 1 is already included in the licence, however, Special Waste Type 2 has been included in the licence.</p>

6. Conclusion

The Delegated Officer has determined that the application to amend the licence expiry date for a period of five years will be granted on the condition that activities and emissions as stated in the current licence will remain unchanged.

DWER's *DER, August 2016. Guidance Statement: Licence duration. Department of Environment Regulation, Perth (Guidance Statement: Licence duration)* states the following:

In determining the licence duration of a licence granted under Part V, Division 3 of the EP Act, the CEO or his/her delegate will have regard to providing the maximum appropriate licence term, up to 20 years, taking account of:

- 1. the duration of other statutory approvals, such as planning approvals;*
- 2. the level of risk of harm to public health and the environment posed by the premises;*
- 3. whether the licenced premises has been subject to recent environmental assessment;*
- 4. matters relevant to the efficient operation of the licensing regime; and*
- 5. any other matter the CEO considers relevant.*

The Mt Brockman, Nammuldi and Silvergrass Iron Ore Mines Lease Numbers, with expiry dates are shown below:

- AM70/272 (M272SA) Expires 21/09/2035, Hamersley Iron (HI);
- AML70/00004 (ML4SA) Expires 24/03/2028, HI;
- L47/647 Expires 18/02/2035, HI;
- G47/1243 Expires 18/09/2032, HI;
- G47/1242 Expires 18/09/2032, HI;
- L47/140 Expires 24/05/2026, HI;
- M47/372 Expires 28/09/2037, HI;
- L47/151 Expires 24/05/2026, HI;
- L47/141 Expires 26/09/2027, HI; and
- L47/152 Expires 24/05/2026, HI.

A five year extension to the expiry date is within the dates listed for other statutory approvals (as per number 1 of the *Guidance Statement: Licence duration*).

Although the maximum licence term can be up to 20 years, as this prescribed premises has planning approvals that expire 24 May 2026, the expiry date can be set as 28 May 2025.

6.1 Summary of amendments

Table 4: Licence amendments

Condition No.	Proposed amendments
Duration	Updated from 29/05/2011 - 28/05/2020 to 29/05/2011 to 28/05/2025
Liquid Chemical Storage condition	Removed and replaced with updated conditions
Reporting conditions	Removed and replaced with updated conditions
Definitions	Definitions have been updated as per transition to the licence template and to be consistent with the licence conditions
Schedule 1 Maps	Figures 1 – 9 have been updated
Previous conditions 34, 38, 39, 40 and 41 added during Amendment Notice 3	Removed as Nammuldi Fixed Plant WWTP as compliance documentation received 25 March 2019 and commissioning documentation received 28 November 2019 and has been deemed compliant.
Previous conditions 35, 36, 37 have been amended	Amended to remove the Nammuldi Fixed Plant WWTP and only refer to the Nammuldi Brockman Incremental Tonnes Plant
Previous conditions 32, 33, 34 and 35 added during Amendment Notice 2	Removed as B2 Putrescible Landfill construction and compliance documentation was received by DWER on 15 September 2017 and has been deemed compliant.
Definitions	Definitions have been updated as per transition to the licence template and to be consistent with the licence conditions
Reporting conditions	Removed and replaced with updated conditions

**ALANA KIDD
MANAGER, RESOURCE INDUSTRIES**

Officer delegated under section 20 of the Environmental Protection Act 1986

Appendix 1: Key documents

Document title	Availability
Email titled "RE: L5258/1991/11 Licence Renewal withdrawn and replaced with L5258 Amendment Application" dated 24/02/2020 10:49am and authored by Rio Tinto	DWER records (A1870592)
Licence L5258/1991/11 Mt Brockman, Nammuldi and Silvergrass Iron Ore Mines	accessed at www.dwer.wa.gov.au
Amendment Notice 1	
Amendment Notice 2	
Amendment Notice 3	
DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	
DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	
DWER, June 2019 <i>Guideline: Decision Making</i> Department of Water and Environmental Regulation	
Email titled "RTIO response_ APPLICANT NOTIFICATION - L5258/1991/11 - NOTICE OF PROPOSED AMENDMENT TO LICENCE" dated 24/04/2020 2:52pm and authored by Rio Tinto	DWER records (A1890109)
Email titled "RE: [External] RE: RTIO response_ APPLICANT NOTIFICATION - L5258/1991/11 - NOTICE OF PROPOSED AMENDMENT TO LICENCE" dated 13/05/2020 09:54am and authored by Rio Tinto	DWER records (A1893001)