



Licence Number	L6942/1997/13
Licence Holder	BHP Billiton Iron Ore Pty Ltd
ACN	008 700 981
File Number:	DER2013/000329
Premises	Eastern Ridge Iron Ore Mine Mining Tenement ML244SA within coordinates MGA Zone 50: NEWMAN WA 6753 As depicted in Schedule 1, Maps and co-ordinates
Date of Amendment	22 March 2019

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.

Alana Kidd

MANAGER, 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
AER	Annual Environmental Report
Amendment Notice	refers to this document
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 10 JOONDALUP DC WA 6919 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
EIP	Environmental Improvement Plan
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
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 amendment
Licence Holder Licensee	BHP Billiton Iron Ore Pty Ltd

Term	Definition
m ³	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
MS	Ministerial Statement
mtpa	million tonnes per annum
NEPM	National Environmental Protection Measure
Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act
PM	Particulate Matter
PM ₁₀	used to describe particulate matter that is smaller than 10 microns (µm) in diameter
Premises	refers to the premises to which this Amendment Notice applies, as specified at the front of this Amendment Notice
Prescribed Premises	has the same meaning given to that term under the EP Act
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
ROM	Run of Mine
TEC	Threatened Ecological Community
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)</i>
µg/m ³	micrograms per cubic metre

Amendment Notice

This amendment is made pursuant to section 59 of the EP Act to amend the 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 to category 5 and 6 activities from the Existing Licence and Amendment Notice 1. No changes to the aspects of the Existing Licence and Amendment Notice 1 relating to categories 63 and 85 have been requested by BHP Billiton Iron Ore Pty Ltd (Licence Holder).

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); and
- *Guidance Statement: Environmental Siting* (November 2016).

Amendment description

On 6 August 2018, the Licence Holder submitted an application (BHP, 2018a) to DWER to amend the Eastern Ridge Iron Ore Mine (Premises) Existing Licence and Amendment Notice 1 for L6942/1997/13.

The Licence Holder applied for the following changes:

- Amend the monitoring frequency for surface water emission point D06 from weekly to quarterly;
- Remove the Orebody 24 pipeline works from Table 1.3.6 Works specifications; and
- Increase the design capacity of category 5 from 32 million tonnes per annum (mtpa) to 36 mtpa by upgrading the drive of the Orebody 24 primary crusher and associated ancillary infrastructure.

On 5 December 2018, the Licence Holder then submitted an application (BHP, 2018b) to construct and operate a 5 mtpa relocatable crusher.

This Amendment Notice is a combined assessment for these two amendment applications outlined above as applied for by the Licence Holder on 6 August 2018 and 5 December 2018 respectively.

Table 2 outlines the proposed design capacity changes to Amendment Notice 1.

Table 2: Proposed design capacity change

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
5	32,000,000 tonnes per annual period	41,000,000 tonnes per annual period	Increase of 9 mtpa. <ul style="list-style-type: none">• 4 mtpa achieved through upgrades to the Orebody 24 processing plant; and• Installation of a 5 mtpa relocatable crusher at Orebody 25.

1. Surface water monitoring - D06

The Licence Holder has requested the frequency of monitoring of discharge from emission point D06 be amended from weekly to quarterly when discharging. Emission point D06 is currently included on the Existing Licence to allow for the contingency discharge of mine dewater from OB25 TPS tank to Homestead Creek during wet weather events and equipment malfunctions.

These discharges occur during control system fault events, whereby water from the OB25 tank could not be transferred. In these events, water overflows when the tank level exceeds the maximum operating level.

The Premises' Annual Environmental Report (AER) for the 1 July 2017 to 30 June 2018 reporting period stated that 4,727 kilolitres (kL) of water was discharged from emission point D06 during the annual period. The monitoring results presented in the *2017/2018 AER* show that Total Dissolved Solids (TDS) concentrations in discharge water was between 880 milligrams per litre (mg/L) and 1,100 mg/L, which is of marginal quality (WRC, 2000). Electrical Conductivity, Total Suspended Solids, Total Recoverable Hydrocarbons and pH were monitored during each discharge event. Results reported in the *2017/2018 AER* indicate that concentrations of the parameters measured, and water pH, were acceptable.

Decision

The Delegated Officer considers that monitoring prior to every discharge is not always practical, noting the tanks only overflow when there is a control system fault and the water is high quality. The Delegated Officer has determined that Condition 3.2.1 will be amended to require monitoring from the OB25 TPS tank (Emission Point D06) on a quarterly basis when discharging.

2. Orebody 24 water conveyance pipeline

The Licence Holder has requested the removal of the Orebody 24 water conveyance pipeline construction requirements from Table 1.3.6 as this infrastructure has been constructed and compliance documentation submitted to DWER on 6 June 2018.

Decision

The Licence Holder submitted compliance documentation (Compliance Report) on 6 June 2018 satisfying condition 1.3.11 and Table 1.3.6, and therefore construction requirements for the water conveyance pipelines from Orebody 24 will be removed accordingly.

3. Category 5 design capacity increase

The Premises is comprised of Orebodies 23, 24, 25 and 32. Amendment Notice 1 currently approves a combined annual ore processing rate of 32 mtpa, which is split between the Orebody 24 ore processing facility (21 mtpa) and Orebody 25 (11 mtpa).

The Licence Holder is proposing to upgrade the drive of the Orebody 24 primary crusher and the Orebody 24 Primary Crusher Conveyor CV1301. The Licence Holder has advised that these works will improve the reliability and operational rate of the crusher enabling an additional 4 mtpa of ore to be processed at the facility. No new infrastructure will need to be constructed for this increase.

The Licence Holder is also proposing to construct and operate a 5 mtpa relocatable crusher at Orebody 25. The relocatable crusher will comprise of the following components, and be located within previously cleared areas at Orebody 25, as shown in Figure 1:

- A modular Primary Crusher;
- Run of Mine (ROM) Bin;

- Various conveyors;
- Two radial stackers;
- Two secondary HP4 cone crushers;
- Three screens; and
- Two sample stations.

The ROM tipping and plant feed area will consist of a compacted earth ROM tipping platform and associated ROM stockpile fingers. Tipping will be done alternatively on the fingers. Feeding of the crusher plant will be by direct tipping with front end loaders. Product from the crushers and screens will be deposited on plant product piles by conveyor belts and stackers.

There will be two ore for rail stockpiles, with a total stockpile capacity of appropriately 120,000 tonnes. Ore will be pre-loaded directly on trains or loaded through the existing train load out facilities at Orebody 25.

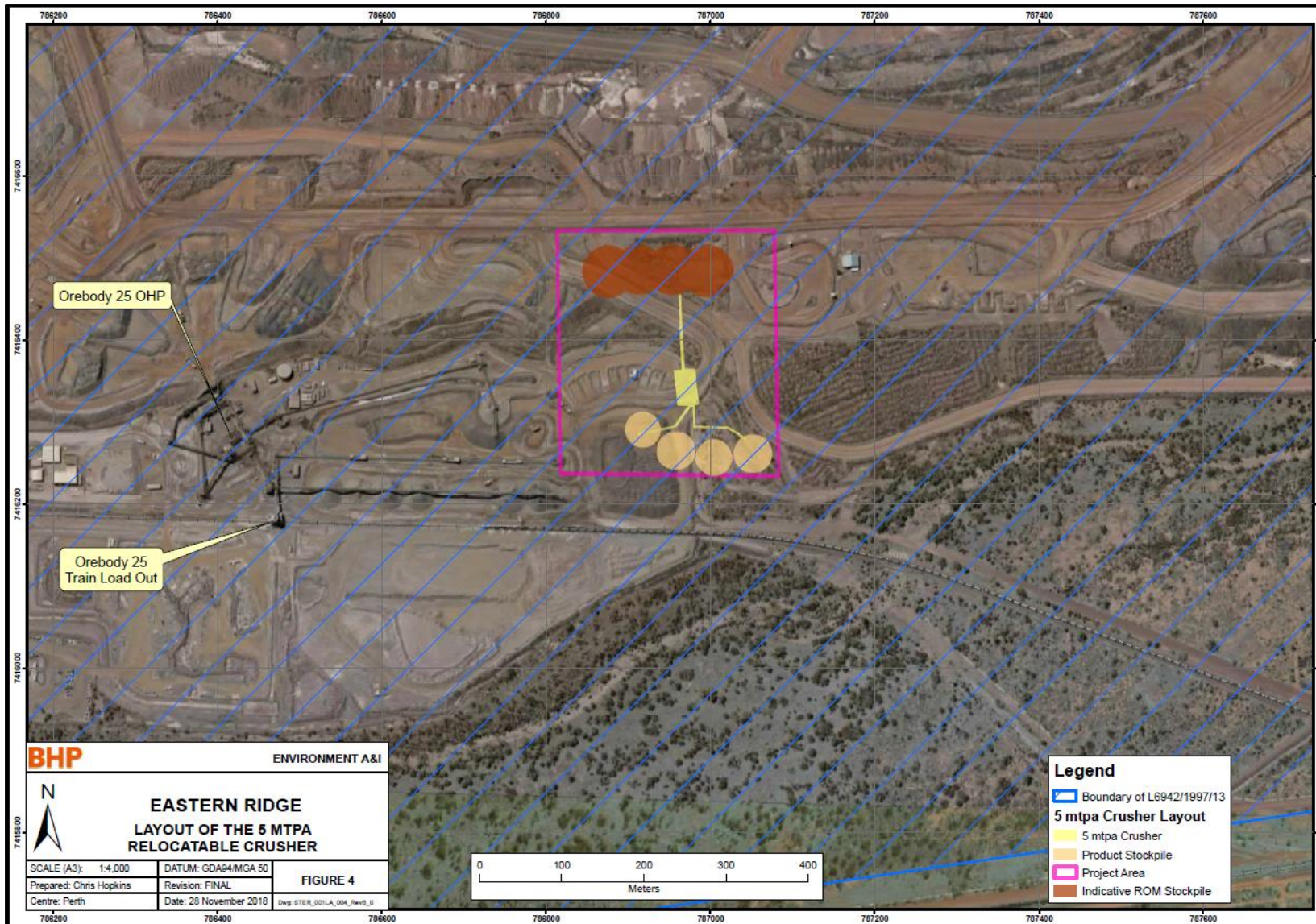


Figure 1: Layout of the 5 mtpa relocatable crusher at Orebody 25

Licence: L6942/1997/13

Other approvals

Other approvals relevant to this amendment are outlined in Table 3.

Table 3: Relevant approvals

Legislation	Number	Approval
Iron Ore (Mount Newman) Agreement Act 1964	Tenement number ML244SA	Approval of a State Agreement proposal is required. The Licence Holder has advised (BHP, 2019) that a draft State Agreement proposal was sent out for Agency comments on 11 February 2019 and are due on 6 March 2019. The Licence Holder anticipates submission of the State Agreement proposal to the Minister in late March for approval in late May.
Part IV of the EP Act	Ministerial Statement (MS) 1037 published (and last updated) on 21 September 2016	MS 1037 approves: <ul style="list-style-type: none"> • Above water table mining at Orebody 32 and below water table mining at Orebody 24, Orebody 25 and Orebody 25 West; and • The discharge of up to 19 gigalitres per annum (GLpa) of surplus dewater into Ophthalmia Dam. MS 1037 supersedes MS 712 (Orebody 25); MS 834 (Orebody 24/25); and MS 1018 (Orebody 32).

Amendment history

Table 4 provides the approval history for Part V (EP Act) approvals relevant to the Premises.

Table 4: Relevant works approvals and amendments issued

Instrument	Issued	Amendment
L6942/1997/11	08/11/2007	Licence amendment to allow processing of iron ore mined from Orebody 23 and Orebody25 at the Orebody 25 processing facilities.

Instrument	Issued	Amendment
L6942/1997/12	11/11/2010	Licence reissue.
W4982/2011/1	15/09/2011	Works approval issued for Orebody 24/25 Upgrade Project. Ore Processing Facility (category 5) and Sewage Treatment Facilities (category 85).
W5282/2012/1	6/12/2012	Works approval issued for Orebody 24/25. Addition of Sewage Treatment Facility (category 85) designed to treat 30 m ³ /day of effluent.
L6942/1997/12	14/11/2013	Licence amendment following completion of works approved through works approval W4982/2011/1.
L6942/1997/13	12/11/2015	Licence reissue and amendment, updated to licence template version 2.9.
L6942/1997/13	9/05/2018	Amendment Notice 1 Licence amendment to: <ul style="list-style-type: none"> • Increase the boundary of L6942/1997/13 (west and north) to include Orebody 24 and amendment of the northeastern section of the premises boundary; • Allow for the construction and operation of dewatering infrastructure from Orebody 24 to the existing Eastern Ridge water network; • Increase the surplus water disposal limit of category 6 by 5.1 GLpa to a total of 19 GLpa; • Include monitoring point D05 (OB25DMDEW005) which receives overflow from the nearby licensed recharge basins; • Increase the limit of category 5 from 31 mtpa to 32 mtpa; and • Remove Discharge Point D03 (OB25DMDEW003) as it is no longer required for operational purposes.
L6942/1997/13	22/03/2019	Amendment Notice 2 Licence amendment to: <ul style="list-style-type: none"> • Increase the limit of Category 5 from 32 mtpa to 41 mtpa; • Include installation of a 5 mtpa relocatable crusher • Amend the monitoring frequency for surface water emission point D06 to quarterly while discharging; and • Remove the Orebody 24 pipeline works from Table 1.3.6 Works specification.

Location and receptors

Table 5 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 5: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Newman Gymkhana and Polocrosse Club – Agistment Area	1.06 km south-southwest of the premises boundary 5.4 km from the Orebody 24 processing area
Parnpajinya Aboriginal Community	1.90 km southwest of the premises boundary 6.1 km from the Orebody 24 processing area
Newman township	2.3 km south-southwest of the premises boundary 6.6 km from the Orebody 24 processing area

Table 6 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 6: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Homestead Creek (as well as adjacent floodplains and major tributaries)	Within the Premises boundary, the creek runs east-west along the south section of the Premises boundary. Surface water (when flowing) travels west to east towards Ethel Gorge. Homestead Creek recharges the superficial aquifer below, from which water is drawn to supply the township of Newman.
Ophthalmia Dam	A portion of the dam is within the southwest corner of the Premises boundary, the northern section of the dam receives dewatering discharge.
Section of the Fortescue River (supporting the Threatened Ecological Community (TEC) of the Ethel Gorge aquifer stygobiont community)	A portion of this TEC is within the Premises boundary, however does not permanently flow and remains dry for the majority of the year. Only flows during flood events.
TEC - Ethel Gorge aquifer stygobiont community listed as “EN B) ii)” Category of Threat and criteria met under WA criteria (DBCA, 2018). This means the TEC is (DEC, 2013): <i>Endangered (EN) - An ecological community</i>	This TEC is located in the groundwater aquifer below the eastern section of the Premises and below licenced discharge points (recharge basins) D04-4 and D04-3. Recharge to the alluvial aquifer system supporting the TEC occurs mostly from

Environmental receptors	Distance from Prescribed Premises
<p><i>that has been adequately surveyed and found to have been subject to major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.</i></p> <p><i>B) Current distribution is limited; and</i></p> <p><i>ii) there are few occurrences, each of which is small and/or isolated and all or most occurrences are very vulnerable to known threatening processes.</i></p>	<p>incidental rainfall and infiltration from surface water flows in Homestead Creek.</p>
<p>Newman Water Reserve (Proclaimed)</p>	<p>This reserve has Priority 1 status and overlies most of the Premises, with the exception of some areas in the north of the premises boundary.</p>

Risk assessment

Tables 7 and 8 below describe the Risk Events associated with the construction and operation of the upgraded Orebody 24 processing plant and the 5 mtpa relocatable crusher (category 5 works) 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 7: Risk assessment for Orebody 24 processing plant upgrades and relocatable crusher during construction

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Category 5 Processing or beneficiation of metallic or non-metallic ore	Upgrade works to the Orebody 24 ore handling facility and conveyor; and construction of the 5 mtpa relocatable crusher at Orebody 25	Dust associated with movement of vehicles during construction activities	Terrestrial vegetation in proximity to the construction area	Transport through air then deposition	Smothering and the potential to be deposited on vegetation which may prevent photosynthesis and plant respiration	Slight	Unlikely	Low	The Delegated Officer considers the natural dust tolerance of vegetation species should prevent vegetation impacts. The construction works will be of relatively short duration and occur within previously cleared areas.
			Residences within the Newman township Parnpajinya Aboriginal Community	Transport through air then transfer through respiratory system	Human health and amenity impacts	Moderate	Possible	Medium	There is at least a 5 km buffer (buffer distance is 5.5 km) between the Orebody 24 processing plant area and the location of the Orebody 25 relocatable crusher to the nearest residential or sensitive receptor. The Delegated Officer considers that the separation distance between the source and potential receptors is sufficient to prevent noise and dust impacts from occurring.
		Noise associated with earthworks and vehicle movements	Newman Gymkhana and Polocrosse Club – Agistment Area	Air or physical medium: vibration of particles	Human health and amenity impacts	Minor	Possible	Medium	The Delegated Officer notes that construction activities, and associated noise and dust emissions, will be of relatively short duration and most likely isolated to the immediate area.

Table 8: Risk assessment for Orebody 24 processing plant upgrades and relocatable crusher during operation

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Category 5 Processing or beneficiation of metallic or non-metallic ore	Operation of 5 mtpa relocatable crusher, and Orebody 24 processing plant including movement of additional 4 mtpa ore product	Dust associated with additional ore handling	Residences within the Newman township	Transport through air then transfer through respiratory system	Health and amenity impacts	Moderate	Possible	Medium	Refer to detailed dust risk assessment below.
			Parnpajinya Aboriginal Community						
		Newman Gymkhana and Polocrosse Club – Agistment Area							
		Adjacent vegetation	Transport through air then deposition	Smothering and the potential to be deposited on vegetation which may prevent photosynthesis and plant respiration	Slight	Unlikely	Low	The Delegated Officer considers the natural dust tolerance of vegetation species should prevent vegetation impacts. The infrastructure is located within cleared areas.	
		Noise	Residences within the Newman township	Air or physical medium: vibration of particles	Human health and amenity impacts	Minor	Possible	Medium	The operation of the 5 mtpa relocatable crusher will result in a slight increase in noise levels in the immediate vicinity of the facility, however the associated noise will be minor relative to the existing noise emissions from the overall mining operations at the Premises.
		Parnpajinya Aboriginal Community							
		Newman Gymkhana and Polocrosse Club – Agistment Area							

Category 5 – Risk assessment - Dust

No alteration to the current dust management and monitoring has been proposed by the Licence Holder in relation to the proposed increase in production capacity for category 5.

On 9 May 2018, the Existing Licence was amended (via Amendment Notice 1) to increase the rate of ore processing from 31 mtpa to 32 mtpa. At this time, conditions were applied requiring the monitoring and reporting of ambient air quality. These conditions were applied to assist in the adequate implementation of the pre-existing dust monitoring programme, to quantify the significance of dust emissions and to determine the ambient dust conditions that may impact the Newman township.

The existing network of real-time monitoring stations relevant to the Premises were included in the Licence, to assist in determining the extent of mine related dust events both for the Premises and Mount Whaleback/Orebody 29, 30 and 35 (Mt Whaleback) (under Licence L4503/1975/14). A 24 hour PM₁₀ target of 70 micrograms per cubic metre ($\mu\text{g}/\text{m}^3$) at the Newman town centre (Newman 1) and Newman 3 (Newman East) monitoring locations was also applied to the Licence.

The fixed ambient air monitors are utilised to determine PM₁₀ levels and potential impacts on the town. The wind arcs utilised by the Licence Holder to indicate potential PM₁₀ levels that has originated from the Premises are provided below as Figures 2 and 3.

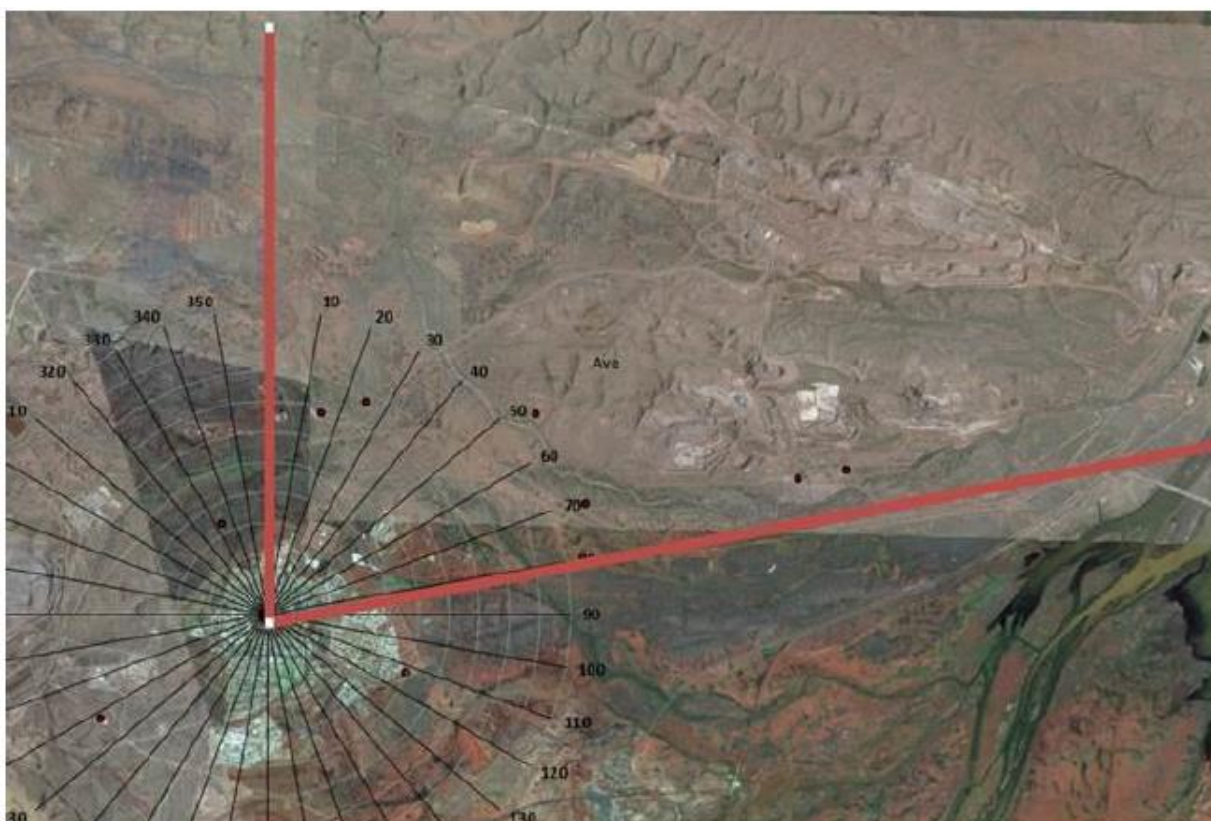


Figure 2: Town Centre (Newman 1) wind arc

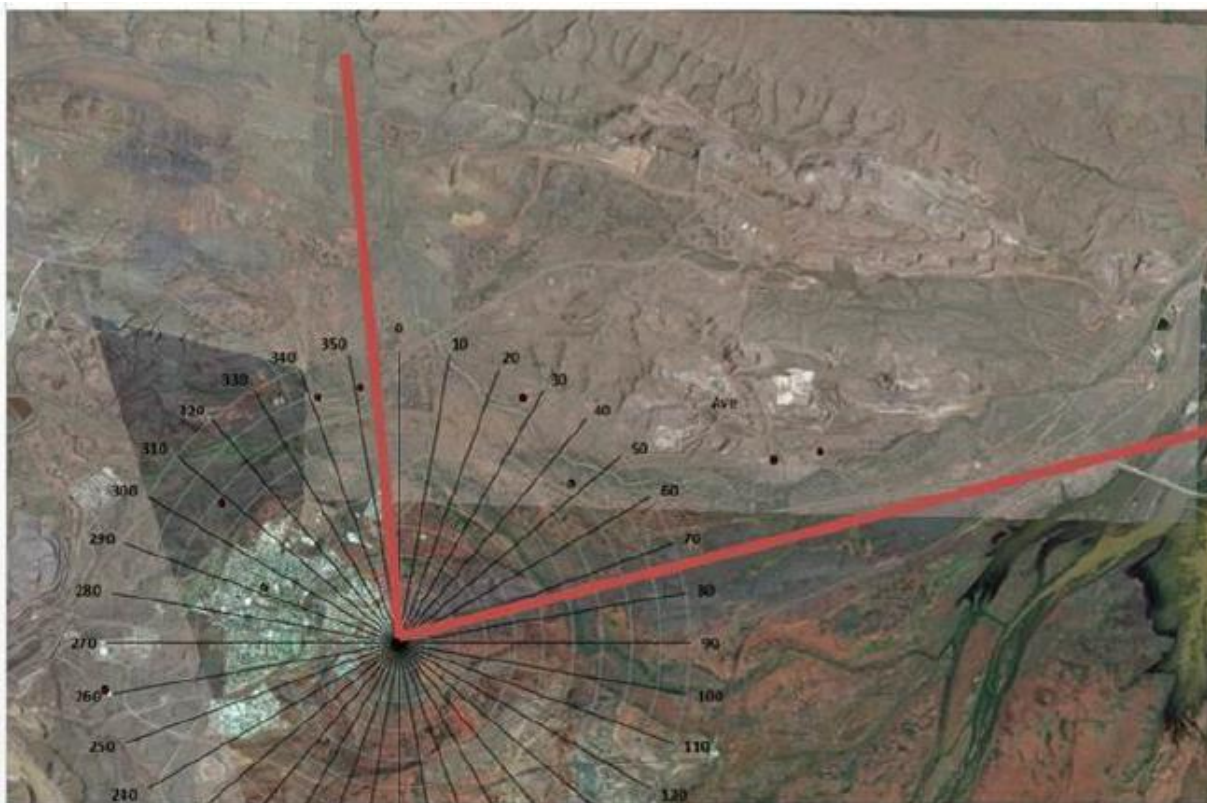


Figure 3: Newman East Wind Arc

The background monitoring site is currently located approximately 5 km north west of the Orebody 24 operations. The Eastern Ridge Orebody 32 monitoring unit is situated approximately 1.2 km south west of the Orebody 25 operations and 2.8 km northwest of the Newman town site.

BHP, 2018a states that an air quality impact assessment was undertaken (Jacobs, 2015) which modelled a processing rate of up to 45 mtpa at the Premises. *Jacobs, 2015* confirmed that “activities at Mt Whaleback and to a lesser extent, Eastern Ridge, contribute to elevated PM₁₀ concentrations (and days above the air quality target) in the Newman township”.

The Delegated Officer notes that the 45 mtpa dust modelling predicted that maximum air quality impacts would be largely the same as the baseline conditions (32 mtpa) but with potential for increases in the number of days per year above the PM₁₀ air quality target (70 µg/m³) and NEPM (50 µg/m³). Based on the modelling and analysis of monitoring data, the Delegated Officer notes that dust impacts at the town of Newman are greater from the Mt Whaleback mine operations than from Eastern Ridge, due to prevailing winds.

The standard and goal for particles as PM₁₀ as outlined in Schedule 1 of the *National Environment Protection (Ambient Air Quality) Measure* (NEPM) is 50 µg/m³ averaged over 1 day, with no exceedances. The Delegated Officer notes that the NEPM provides a national framework for all Australian jurisdictions to monitor and publicly report on common ambient air pollutants.

The NEPM guidance publications including the Explanatory Statement clearly outline the application of the NEPM and identifies that the imposition of NEPM ambient air quality standards as boundary or compliance limits is not consistent with the aims and intent of the NEPM. The NEPM sets national air quality standards and goals for six common ambient air pollutants, including PM₁₀. They are based on health evidence of the impacts of air pollutants available at the time the standards are set; and are designed to provide protection to people from the pollutants’ adverse human health effects. The standards are also designed to be realistically achievable in the different Australian jurisdictions with a focus on large urban areas, where the

majority of Australia's population resides.

The NEPM aims to guide policy formulation that allows for the adequate protection of human health and wellbeing. It does not compel or direct pollution control measures, or set penalties for non-compliance. (Department of Environment and Energy, 2018).

DWER supports the implementation of the NEPM in Western Australia by maintaining an air quality monitoring network and providing air quality data and reporting. Where appropriate, DWER uses NEPM goals to assess risks to public health and set emission limits.

The NEPM requires participating jurisdictions to undertake nationally consistent monitoring and reporting activities that support the formulation of air quality management policies. NEPM monitoring protocols provide guidance to jurisdictions on monitoring population exposure to air pollution.

NEPM standards are health based. The standards in the NEPM are not intended to be applied as an environmental standard by jurisdictional environmental regulators without consideration of regulatory impacts. Section 7 of the *National Environment Protection Council Act 1994* allow jurisdictions to implement the NEPM by such laws and other arrangements as are necessary. The implementation of the NEPM does not preclude jurisdictions from adopting tighter or complementary standards or goals for their own policy or regulatory purposes. In doing this, jurisdictions may utilise a risk-based approach in determining environmental standards appropriate for their own circumstances or conditions, along with improvement strategies for regulated and non-regulated sources and exposure reduction strategies.

The NEPM provides for DWER the responsibility to manage, and where appropriate to regulate, air quality to achieve protection of human health. It does not obligate DWER to ensure that PM₁₀ emissions do not at any time or in any location, exceed the criteria intended to protect population health.

NEPM implementation guidance is understood and implemented by experts in air quality management within DWER. This guidance provides for regulation of individual premises in order to meet the measure in populated areas but specifically states that the measure is not suitable for use as a boundary or compliance limit in regard to those individual premises.

Operations currently conducted at the Premises have the following standard controls adopted for management of dust:

- Dampening haul roads, unsealed roads and construction area with water trucks;
- Dust extraction via collectors;
- Transfer points enclosed and fitted with water sprays;
- Land disturbance and exposed soil restricted to a practicable minimum;
- Sprinklers/water sprays on the processing circuit (e.g. Primary crusher bins, ore stockpiles);
- Ore conditioning;
- Dust suppression equipment maintained in efficient operating condition in accordance with relevant regulations;
- Vehicle speeds on haul roads restricted to minimise dust;
- Where practicable, blasting is timed to coincide with favorable wind and weather conditions;
- Routine maintenance and housekeeping practices are implemented to ensure waste materials do not accumulate and lead to the generation of unacceptable airborne dust;
- Informing all employees and contractors of the importance of minimising ambient dust

levels;

- Online moisture sensors are installed to monitor the moisture of material on the conveyor system, at conveyors CV108, RC01 and RC03. These locations provide an opportunity for ore moisture data before stockpiling, and prior to train loading. In the event that moisture content is outside the accepted ore moisture range, the water supply is adjusted to ensure adequate dust suppression;
- Rehabilitation of disturbed areas; and
- A dust monitoring programme.

With respect to the dust monitoring program, where airborne dust levels have:

- Exceeded the licence conditions; and/or
- Been associated (through exposure assessment program or individual risk assessment) to be above the specified limits; or
- Present a risk to the health and safety of any person at iron ore operations and/or the local community;

The Licence Holder has advised the following response actions will be carried out:

- Exceedances managed in accordance with iron ore event management procedures including investigation, external reporting and/or escalation protocols as required;
- For each exceedance, inspection of plant equipment, operating method and operating area is undertaken to identify the cause of the reported increased airborne dust level;
- Apply adaptive management to reduce the amount of airborne dust being generated, response actions that include:
 - Operations modified in/with consideration of wind direction;
 - Additional dust control equipment assigned to relevant specific work areas; and
 - Preventative maintenance scheduled to enable dust suppression systems to operate to required availability.

Consequence:

The dust management controls listed above are the standard controls as outlined in the current management plans (Orebody 23 Environmental Management Plan and Orebody 24/25 Upgrade Project Environmental Management Plan) for the Premises.

The Delegated Officer notes that no exceedances of the specified target of 70 µg/m³ have been reported to DWER since the Licence was amended (9 May 2018), and the target, came into effect.

However, previous self-reporting by the Licence Holder for the Mt Whaleback premises (L4503/1975/14) where the licence target (70 µg/m³) for PM₁₀ 24 hour average has been exceeded (Newman 1), these exceedances occurred during low speed wind conditions and a wind orientation of approximately 200-330 degrees. This indicates that operations at the Premises have the potential to impact on Newman 1 in low wind speed conditions and a wind orientation of approximately 66-92 degrees. Therefore, at current operating conditions, off-site impacts are possible.

The Licence Holder reports exceedances to DWER whether possibly attributable to mining operations or not, and is currently developing a plan with outcomes and timeframes for better dust management and reduction across all sites.

The Specific Consequence Criteria for public health are at risk of not being met and the consequence is determined to be moderate.

Likelihood:

The risk event could occur at some time. The likelihood of the consequence occurring has been determined as possible.

Overall Risk Rating:

Comparison of the consequence and likelihood ratings described above with the Risk Rating Matrix (*Guidance Statement: Risk Assessments*) determines the overall rating of risk of health and amenity impacts to be **medium**.

Category 5 – Decision and amendment

The category 5 design capacity is increased from 32 mtpa to 41 mtpa; the prescribed premises category table and condition 1.3.8 is updated to reflect this change.

Condition 1.3.12 is updated to include works specifications for the Orebody 24 ore handling plant upgrades and the 5 mtpa relocatable crusher as per the Licence Holder's commitments (BHP, 2018b and BHP, 2018c).

The increase in throughput from 32 mtpa to 41 mtpa will result in an increase to the existing dust emissions at the Premises, without additional dust controls proposed. The Licence Holder has indicated that the increase in production for the Orebody 24 primary crusher will largely be achieved by minor upgrades to improve its efficiency. This also coincides with a decrease in strip ratio associated with accessing more high-grade ore. The increased efficiency measures will reduce the amount of material handled and hence there should be no significant change to dust levels. However, these assertions cannot be verified.

The modelling for the 45 mtpa scenario at the Premises (Jacobs, 2015) shows that there is potential for increases in the number of days per year above air quality targets and standards, specifically in Newman (attributable to Mt Whaleback and to a lesser extent, the Premises). While the proposed 9 mtpa increase to 41 mtpa may appear relatively small and the Licence Holder expects no significant change to dust emissions, it is important to note that the airshed is constrained, notwithstanding the relative contribution of different sources, both anthropogenic and natural.

The Delegated Officer has determined that further regulatory control will be required, specifically with a focus on continuous improvements to manage the risk associated with dust emissions from the Premises. A review of the dust monitoring network will be required to verify if the existing monitoring locations are appropriate, or if the network needs to be improved to ensure accurate monitoring data is being produced for analysis.

Condition 4.1.1 is amended to include the requirement to submit an Environmental Improvement Plan (EIP) to address dust emissions from the Premises, specifically addressing the following:

- Current design and operation of dust control infrastructure and procedures at the Premises;
- Identify specific continuous improvement measures to be implemented, including timeframes, to reduce dust emissions from the Premises and how these improvements will be measured; and
- Review the existing Newman dust monitoring network, identifying improvements and timeframes for implementation.

A timeframe of six months is specified for the submission of the EIP. Following submission, and DWER's review and endorsement of the Plan, Licence L6942/1997/13 will need to be amended to include conditions requiring implementation of specific components of the EIP, as required.

Category 6 – Decision and amendment

Emission point D06

The Delegated Officer has determined that Condition 3.2.1 will be amended to require monitoring from the OB25 TPS tank (Emission Point D06) quarterly when discharging, as discussed and explained in Section 1 above.

Emission point D05

The Licence Holder provided an updated figure within *BHP, 2018a* which removed Emission Point D05. Emission Point D05 is the combined mine dewater from Emission Points D04-3 and D04-4 (infiltration basins), which overtop in contingency situations. During overtopping events, water from D04-3 and D04-4 travels down a v drain towards a recharge basin at the base of the Ophthalmia Dam wall. Weekly monitoring of D05 is required when overflow from D04-3 and D04-4 occurs.

The Licence Holder has advised that D05 is more accurately a monitoring point to monitor the water quality of potentially blended water from the overtopping of ponds D04-3 and D04-4 (*BHP, 2018d*). The monitoring point is easily accessible and is sufficiently downstream of the overflow ponds to ensure that if both ponds were overtopping at the same time, sufficient mixing will have occurred for a representative sample of the blended water quality.

The Delegated Officer has determined to retain D05, as water from this location discharges offsite to a recharge basin at the base of Ophthalmia Dam. Therefore, Schedule 1, Map 2 of the Existing Licence has been retained.

Pipeline construction requirements

Condition 1.3.11, Table 1.3.6, construction requirements for the water conveyance pipelines from Orebody 24 are removed as they are now redundant.

Other amendments

During this amendment the following changes are also made to the Licence:

- Definitions are updated.
- Inclusion of the wording for conditions 3.6 and 3.6.1.
- Condition 4.1.1 for the previous IR1 are removed. The Licence Holder submitted Improvement Reference IR1 on 8 August 2018. DWER responded on 29 August 2018 stating that condition 4.1.1 Improvement Reference IR1 reporting requirements have been met.
- Condition 4.1.1 for previous IR2 associated with Amendment Notice 1 (granted 9/05/2018) has been updated to IR1 and date of completion changed from “Provision of the report 12 months from the approval of this amendment” to “due 9/05/2019”.
- Schedule 1: Map 1 is updated.
- Schedule 2: Annual Audit Compliance Report Proforma is removed.

Licence Holder’s Comments

The Licence Holder was provided with the draft Amendment Notice on 15 February 2019. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

Amendment

1. Prescribed premises category, Schedule 1 of the *Environmental Protection Regulations 1987* table is amended by the deletion of the text down in strikethrough below and the insertion of the bold text shown in underline below:

Category number	Category description	Category production or design capacity	Approved Premises production or design capacity
5	Processing or beneficiation of metallic or non-metallic ore	50,000 tonnes or more per year	32, <u>41</u> ,000,000 tonnes of ore per annual period
6	Mine dewatering	50,000 tonnes or more per year	19 gigalitres per annual period
63	Class 1 inert landfill site	500 tonnes or more per year	10,000 tonnes per annual period
85	Sewage facility	More than 20 but less than 100 cubic metres per day	52 cubic metres per day

2. Definitions have been amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

‘Annual Audit Compliance Report’ means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department’s website);

‘CEO’ means Chief Executive Officer of the Department of Environment Regulation

‘CEO’ for the purposes of correspondence notification means:

~~Chief Executive Officer~~ **Director General**
 Department Administering the ~~Environmental Protection Act 1986~~
 Locked Bag 33 **10**
 CLOISTERS SQUARE
 PERTH **JOONDALUP DC** WA **6919** ~~6850~~
 Email: ~~info@der.wa.gov.au;~~ **info@dwer.wa.gov.au**

‘Department’ means the department established under section 35 of the Public Sector Management Act 1994 and designated as responsible for the administration of Part V, Division 3 of the Act;

‘Landfill Definitions’ means the document titled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time;

3. Condition 1.3.8 of Amendment Notice 1 is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

1.3.8 The Licensee shall ensure the limits specified in Table 1.3.5 are not exceeded.

Table 1.3.5 Production or design capacity limits		
Category¹	Category description¹	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore	32 <u>41,000,000</u> tonnes of ore per annual period
6	Mine dewatering	19 gigalitres per annual period

Note 1: *Environmental Protection Regulations 1987, Schedule 1.*

4. Condition 1.3.12 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

1.3.12 Where a departure from the requirements specified in Column 2 **or Column 3** of Table 1.3.6 occurs and is of a type allowed by Condition **1.3.10** 2, the Licence Holder must provide to the CEO a description of, and explanation for, the departure along with the report required by Condition 1.3.11.

Table 1.3.6 Works specifications		
Column 1	Column 2	Column 3
Infrastructure / Equipment	Requirements (design and construction)	Location - Site plan reference
Water conveyance pipelines from OB24	Approximately 9.0 kilometres of 400DN (diameter) pipework with some 315DN and 250DN in pit. The pipeline is to be predominantly installed above ground but buried in selected areas within the pit and installed in Polyethylene culverts (sleeves) for road crossings. Tie-in of pipelines to existing dewatering discharge pipelines.	Schedule 1, Map 1 (labelled 'Indicative Pipeline Route')
Orebody 24 Ore Handling Plant upgrades	<u>Upgrades to the Orebody 24 Primary Crusher (CR1300), including installation of a new 450 kW crusher motor (speed 750 rpm)</u> <u>Upgrades to the Orebody 24 Primary Crusher Discharge conveyor (CV1301) including adjustment to the surge bar height setting</u>	<u>Schedule 1, Map1 - infrastructure labelled 'Orebody 24 Crusher and Train Load Out'</u>
<u>5 mtpa Relocatable crusher</u>	<ul style="list-style-type: none"> • <u>A modular Primary Crusher;</u> • <u>Run of Mine (ROM) Bin;</u> • <u>Various conveyors;</u> • <u>Two radial stackers;</u> • <u>Two secondary HP4 cone crushers;</u> 	<u>Schedule 1, Map1 – infrastructure labelled 'Orebody 25 5 Mtpa Relocatable Crusher'</u>

	<ul style="list-style-type: none"> • <u>Three screens; and</u> • <u>Two sample stations.</u> • <u>ROM tipping and plant feed area consisting of a compacted earth ROM tipping platform and associated ROM stockpile fingers.</u> 	
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5. Condition 3.2.1 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of point source emissions to surface water				
Emission point reference	Monitoring point location	Parameter	Units	Frequency
D01	Flow meters to discharge point	Volumetric flow rate (cumulative)	L/s and m ³ /day	Continuous
D02		Electrical conductivity	(µS/cm)	Quarterly when discharging
D04-3		pH ¹	pH units	
D04-4		Total Dissolved Solids Total Hardness as CaCO ₃ Total Suspended Solids Total Recoverable Hydrocarbons (TRH) Aluminium (Al) Arsenic (As)	mg/L	
D05	Monitoring point located downstream from D04-4 and D04-3 overflow points	Barium (Ba) Boron (B) Calcium (Ca) Cadmium (Cd) Chlorine (Cl) Carbonate (CO ₃) Chemical Oxygen Demand (COD) Chromium (Cr) Copper (Cu) Fluoride (F ⁻) Iron (Fe) Bicarbonate (HCO ₃) Mercury (Hg) Potassium (K) Magnesium (Mg) Manganese (Mn) Mercury (Hg) Molybdenum (Mo) Sodium (Na) Nickel (Ni) Nitrate (NO ₃) Lead (Pb)		Weekly when overflow from D04-4 and D04-3 occurs

		Selenium (Se) Silica (SiO ₂) Sulfate (SO ₄) Total Nitrogen (TN) Total Phosphorus (TP) Vanadium (V) Zinc (Zn)		
D06	Flow meter to discharge point	Volumetric flow rate (cumulative)	L/s and m ³ /day	Continuous when discharging
	Discharge point	Electrical conductivity	(µS/cm)	Weekly when discharging <u>From OB25 TPS tank quarterly when discharging</u>
		pH ¹	<u>pH units</u>	
		Total Dissolved Solids	mg/L	
		Total Suspended Solids	mg/L	
Total Recoverable Hydrocarbons	mg/L			

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

6. The Licence is amended by the insertion of Conditions 3.6 and 3.6.1 shown in bold text and underline below:

3.6 Air quality monitoring

3.6.1 The Licensee shall undertake the monitoring in Table 3.6.1 according to the specifications in that table.

Table 3.6.1: Monitoring of ambient air quality							
Monitoring point reference and location	Parameter	Target	Units¹	Averaging period	Average wind direction (degrees)	Frequency	Method
Newman 1 ('Town Centre')(WB AQRT010)	Particulates as PM ₁₀	<70	µg/m ³	24 hours	355 to 90	Continuous	AS 3580.9.11
Newman 3 ('Newman East')(WBAQ RT006) McLennan Drive							

Note 1: All units are referenced to STP dry.

7. Condition 4.1.1 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below:

4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1.

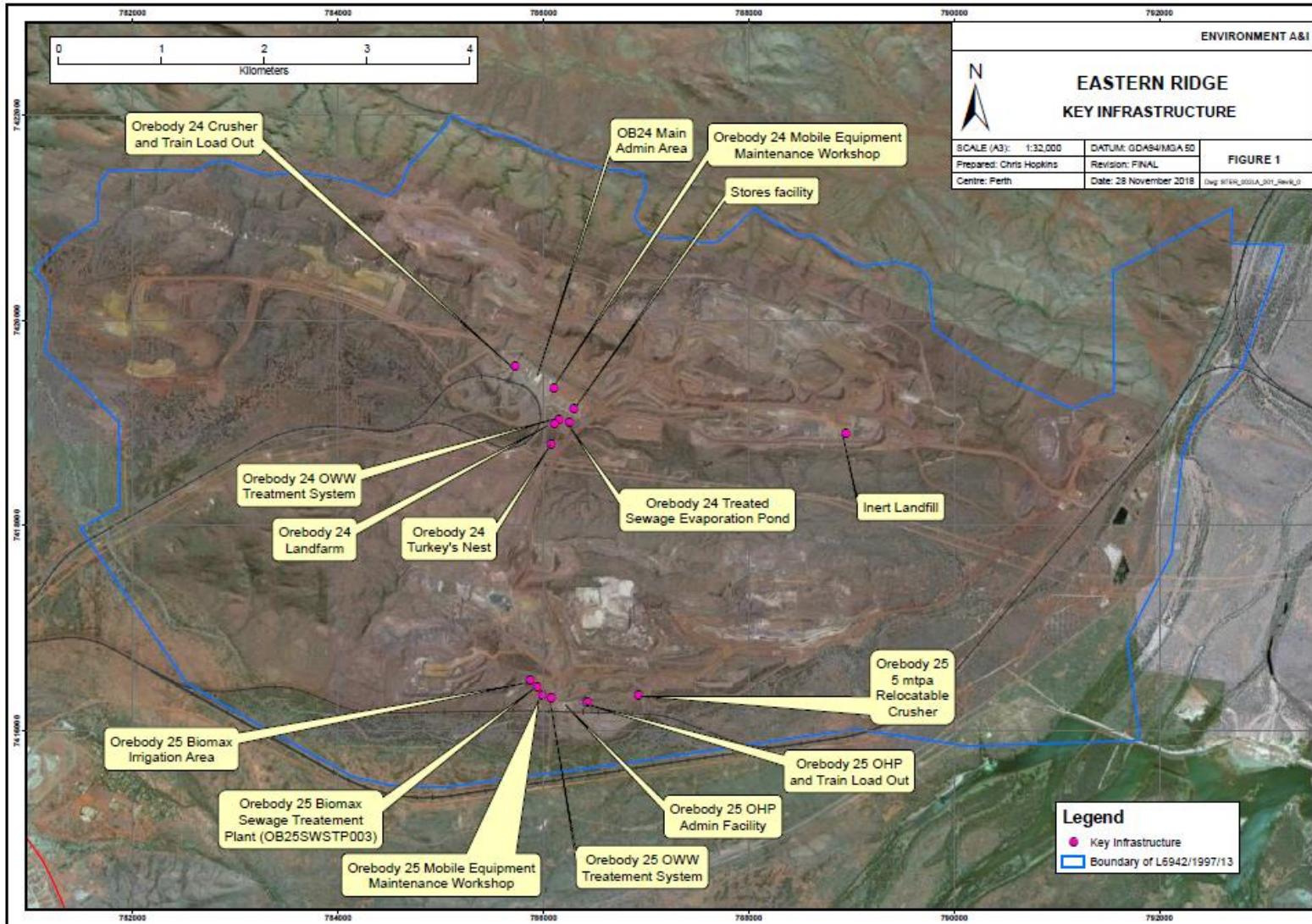
Table 4.1.1: Improvement program		
Improvement reference	Improvement	Date of completion
IR1	The Licence Holder shall undertake a gap analysis between Golders 2013 and 2015 (Site Specific Trigger Values reports) to determine which are the appropriate SSTV's for indicating a potential	Three months from the approval of this amendment

	environmental problem and so ‘trigger’ further investigation by the Licence Holder.	
<u>IR12</u>	The Licence Holder shall undertake an investigation, including revision of current aquifer and emissions data and provide a report detailing the most appropriate water quality SSTV’s for the aquifers and borefield in and surrounding the Premises. The report is to include assessment of all monitoring parameters as listed in Table 3.2.1 of this Licence and provide sufficient justification on how the Licence Holder has determined the appropriate water quality SSTV’s for indicating a potential environmental problem and so ‘trigger’ further investigation by the Licence Holder.	Due 9/05/2019 Provision of the report 12 months from the approval of this amendment
<u>IR2</u>	<u>The Licence Holder shall submit to the CEO a Dust Management Plan for the Premises operations, which:</u> <ul style="list-style-type: none"> • <u>documents the current design and operation of dust control infrastructure and procedures at the Premises;</u> • <u>identifies specific continuous improvement measures to be implemented, including timeframes, to reduce dust emissions from the Premises and how these improvements will be measured; and</u> • <u>reviews the existing Newman dust monitoring network, identifying improvements and timeframes for implementation.</u> 	<u>Six months from the issue of this amendment</u>

8. Schedule 1: Maps and coordinates, *Map 1* of the Licence is replaced by the map shown in Attachment 1.
9. Schedule 2: Reporting & notification forms, *Annual Audit Compliance Report Proforma* of the Licence is removed.

Attachment 1

Map 1 – Premises Map with key infrastructure. The blue line depicts the Premises boundary.



Licence: L6942/1997/13

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Addendum to the August 2018 Application to Amend the Eastern Ridge Hub Environmental Licence L6942/1997/13, Licence Amendment Supporting Documentation (including information relating to Attachments 1 to 10), BHP Billiton Iron Ore Pty Ltd, December 2018	BHP, 2018b	DWER record A1745480
2	Annual Environmental Report, July 2017 – June 2018, BHP Billiton Iron Ore Pty Ltd	2017/2018 AER	DWER record A1724228
3	Application to Amend the Eastern Ridge Hub Environmental Licence L6942/1997/13, Licence Amendment Supporting Documentation (including information relating to Attachments 1 to 10), BHP Billiton Iron Ore Pty Ltd, August 2018	BHP, 2018a	DWER record A1709606
4	BHP Billiton Iron Ore Pty Ltd Annual Environmental Report, July 2017 – June 2018, BHP	2017/2018 AER	DWER record A1724228
5	BHP Billiton Iron Ore Orebody 24/25 Upgrade Project Environmental Management Plan, Revision 4, January 2010	BHPBIO, 2010	DWER record A5705147
6	Definitions, Categories and Criteria for Threatened and Priority Ecological Communities, Department of Environment and Conservation, January 2013	DEC, 2013	accessed at www.dpaw.wa.gov.au
7	Eastern Ridge Revised Proposal Air Quality Environmental Impact Assessment (Final/Revision 0), Unpublished report of BHP Billiton Iron Ore, 30 October 2015	Jacobs, 2015	available from Licence Holder
8	Guidance Statement: Decision Making, Department of Environment Regulation, February 2017	Guidance Statement: Decision Making	accessed at www.dwer.wa.gov.au
9	Guidance Statement: Environmental Siting, Department of Environment Regulation, November 2016	Guidance Statement: Environmental Siting	

	Document title	In text ref	Availability
10	Guidance Statement: Regulatory principles, Department of Environment Regulation, July 2015	Guidance Statement: Regulatory principles	
11	Guidance Statement: Risk Assessment, Department of Environment Regulation, February 2017	Guidance Statement: Risk Assessment	
12	Guidance Statement: Setting conditions, Department of Environment Regulation, October 2015	Guidance Statement: Setting conditions	
13	L6942/1997/13 – Request for Additional Information, received from Chris Hopkins (BHP), dated 26 September 2018	BHP, 2018c	DWER records A1725874
14	Licence L6942/1997/13 – Eastern Ridge Iron Ore Mine, amended 12 November 2015	Existing Licence	accessed at www.dwer.wa.gov.au
15	Licence L6942/1997/13 – Eastern Ridge Iron Ore Mine, amended 9 May 2018	Amendment Notice 1	
16	List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment, Department of Biodiversity Conservation and Attractions, 28 June 2018	DBCA, 2018	accessed at www.dpaw.wa.gov.au
17	Ministerial Statement 1037	MS 1037	accessed at www.epa.wa.gov.au/
18	National Environmental Protection (Ambient Air Quality) Measure	NEPM	accessed at www.nepc.gov.au
19	RE: Applicant Notification – L6942/1997/13 – Notice of Proposed Amendment to Licence, received from Chris Hopkins (BHP), 26 February 2019	BHP, 2019	DWER records DWERDT137761
20	RE: L6942/1997/13 – Eastern Ridge amendment – Discharge Point D05, received from Chris Hopkins (BHP), dated 22 October 2018	BHP, 2018d	DWER records A1731309
21	Re: Licence L6942/1997/13 Compliance Report, BHP Billiton, 6 June 2018	Compliance Report	DWER record A1711355
22	RE: Licence L6942/1997/13 Improvement Reference IR1, BHP Billiton, 8 August 2018	Improvement Reference IR1	DWER record 1714203
23	Water facts 15 – Salinity, Water and Rivers Commission, June 2000	WRC, 2000	accessed at www.water.wa.gov.au

Appendix 2: Summary of Licence Holder comments

The Licensee was provided with the draft Amendment Notice on 15 February 2019 for review and comment. The Licensee responded on 26 February 2019 with the following comments (BHP, 2019).

Condition	Summary of Licence Holder comment	DWER response
Condition 3.6.1	Amendment Notice 1 omitted conditions 3.6 and 3.6.1, instead just including Table 3.6.1. The Licence Holder has requested that these conditions be included under this Amendment Notice.	The wording for conditions 3.6 and 3.6.1 have been added to this Amendment Notice.
Condition 3.2.1	<p>The Licence Holder has stated that the amendment to the monitoring of D06 requiring the OB25 tank to be monitored prior to each discharge event is impractical to undertake as these tanks are maintained at high levels (for operational reasons) and staff managing these areas do not work night shift.</p> <p>The tanks only overflow when a control system fault event occurs. If the tank is to be monitored prior to each discharge event, this would essentially require the tanks to be monitored as soon as a control system fault is identified, which isn't possible if the subsequent discharge occurred at night.</p> <p>Given the high quality nature of the discharge water, the Licence Holder has requested that the monitoring requirement for this point be quarterly when discharging.</p>	The monitoring frequency for the D06 discharge point has been changed to quarterly when discharging. The onus remains on BHPBIO to not cause environmental harm and the water is noted good quality.
Decision	Summary of Licence Holder comment	DWER response
Category 5 – Risk assessment - Dust	Page 14, paragraph 4 refers to “particulate deposition” and deposition of particulates”. The Licence Holder has stated this should read “PM ₁₀ levels”.	The paragraph has been updated as requested.
	Page 17, first dot point regarding moisture sensors. The Licence Holder has requested that for the flexibility of installing new and better technology as it becomes available this dot point be updated to read “ <i>Online</i>	This dot point has been updated as requested.

Condition	Summary of Licence Holder comment	DWER response
	<p><i>moisture sensors are installed to monitor the moisture of material on the conveyor system, at conveyors CV108, RC01 and RC03. These locations provide an opportunity for ore moisture data before stockpiling, and prior to train loading. In the event that moisture content is outside the accepted ore moisture range, the water supply is adjusted to ensure adequate dust suppression</i>".</p> <p>Page 17, paragraph 3, under Consequence. The Licence Holder has questioned whether the intent of the paragraph is to state "<i>However, there have been previous self-reporting by the Licence Holder for the Whaleback Prescribed Premises (L4503/1975/14) where the PM₁₀ 24 hour average of 70 µg/m³ has been exceeded (Newman 1 Town Centre). These exceedances have occurred during low speed wind conditions and a wind orientation of approximately 200 to 330 degrees. This indicates that operations at Eastern Ridge have the potential to impact on Newman 1 Town Centre in low wind speed conditions and a wind orientation of approximately 66-92 degrees</i>".</p>	<p>This paragraph has been updated to read "<i>However, previous self-reporting by the Licence Holder for the Mt Whaleback premises (L4503/1975/14) where the licence target (70 µg/m³) for PM₁₀ 24 hour average has been exceeded (Newman 1), these exceedances occurred during low speed wind conditions and a wind orientation of approximately 200-330 degrees. This indicates that operations at the Premises have the potential to impact on Newman 1 in low wind speed conditions and a wind orientation of approximately 66-92 degrees. Therefore, at current operating conditions, off-site impacts are possible</i>".</p>
<p>Category 5 – Decision and amendment</p>	<p>Page 18, paragraph 3. The Licence Holder states that it is unclear where the reference to "22% increase to dust emissions" has come from as the "<i>modeling of Eastern Ridge Operating at 45 mtpa and Whaleback at 80 mtpa (Jacobs, 2015) indicates two additional days above 70 ug/m³ at Newman 1 "Town Centre" and Newman Golf club. No additional exceedances occur at other monitoring sites. The current amendment seeks to increase to a maximum of 41 mtpa which is less than the modelled 45 mtpa scenario</i>".</p> <p>The Licence Holder also requests that the reference to higher grade ores (as shown in strikethrough below) be changed to lower strip ratio (as shown in bold below):</p>	<p>The reference to "22% increase" came from internal correspondence within DWER.</p> <p>To avoid confusion this paragraph has been updated to read "<i>The increase in throughput from 32 mtpa to 41 mtpa will result in an increase to the existing dust emissions at the Premises, without additional dust controls proposed. The Licence Holder has indicated that the increase in production for the Orebody 24 primary crusher will largely be achieved by minor upgrades to improve its efficiency. This also coincides with a decrease in strip ratio associated with accessing more high-grade ore. The increased efficiency measures will</i></p>

Condition	Summary of Licence Holder comment	DWER response
	<p>The Licence Holder has indicated that increased efficiency measures (e.g. higher grade ores lower strip ratio) will reduce the amount of material handled and hence there will be no significant change to dust levels.</p> <p>Page 18, paragraph 4. This paragraph previously said “<i>The Delegated Officer also notes that the monitoring data from Newman 1 “Town Centre” indicates that there are currently exceedances of the Licence target for PM₁₀.</i>”</p> <p>The Licence Holder has stated that reviews of these events have identified that where exceedances have been attributable to the Licence Holder’s operations the source of the exceedance has been operations at the Whaleback Hub.</p>	<p><i>reduce the amount of material handled and hence there should be no significant change to dust levels. However, these assertions cannot be verified</i>’.</p> <p>This paragraph has been updated to read “<i>The modelling for the 45 mtpa scenario at the Premises (Jacobs, 2015) shows that there is potential for increases in the number of days per year above air quality targets and standards, specifically in Newman (attributable to Mt Whaleback and to a lesser extent, the Premises). While the proposed 9 mtpa increase to 41 mtpa may appear relatively small and the Licence Holder expects no significant change to dust emissions, it is important to note that the airshed is constrained, notwithstanding the relative contribution of different sources, both anthropogenic and natural</i>”.</p>