



Amendment Notice 1

Licence Number	L5258/1991/11
Licence Holder	Pilbara Iron Company (Services) Pty Ltd
ACN	107 210 248
Registered business address	Level 22, Central Park 152-158 St Georges Terrace PERTH WA 6000
Date of amendment	18 October 2016
Prescribed Premises	Category 5: Processing of beneficiation of metallic or non-metallic ore; Category 6: Mine dewatering; Category 12: Screening, etc. of material; Category 54: Sewage facility; Category 64: Class II putrescible landfill site; Category 73: Bulk storage of chemicals, etc
Premises	Mount 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

Amendment

The Chief Executive Officer (CEO) of the Department of Environment Regulation (DER) has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date signed: 18 October 2016

Agnes Tay

DIRECTOR STRATEGY AND REFORM

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

Amendment Notice

This notice is issued under section 59 of the *Environmental Protection Act* 1986 (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.

Amendment Description

On 4 August 2016 (and resubmitted on 9 August 2016) Pilbara Iron Company (Services) Pty Ltd (Licence Holder) submitted an application to DER for an amendment to the Mt Brockman and Nammuldi Iron Ore Mines licence (L5258/1991/11). The licence amendment application relates to the proposed construction of a fuel storage facility, waste dump landfill, primary crusher and conveyor at the Silvergrass East (SGE) Project adjacent to Brockman 2 Nammuldi.

The proposed facilities are activities that fall within the current Mt Brockman and Nammuldi Iron Ore Mines licence, being Category 5: Processing of beneficiation of metallic or non-metallic ore (primary crusher and conveyor); Category 64: Class II putrescible landfill site; and Category 73: Bulk storage of chemicals, etc (fuel storage facility).

Table 1 below outlines the proposed changes to the licence requested by the Licence Holder, in relation to Categories 5, 64 and 73.

Table 1 – Proposed design capacity requested in amendment as application

Category	Current Design Capacity	Proposed Design Capacity	Description of proposed extent
5	45 million tonnes per annum (mtpa) period	56mtpa period	To increase the processing rate at Nammuldi Central Processing Plant to 46mtpa and included the processing rate at Brockman 2 of 10mtpa
64	5,114 tonnes per annum (tpa)	7,634tpa period	To construct an additional waste dump landfill with an estimated rate of waste disposal of 2520tpa
73	18,740 cubic metres (m ³)	20,260 m ³	To include additional fuel storage and refueling infrastructure due to an increase in the size of the mining fleet at SGE. This includes the installation of a total capacity of 1320kL double skinned diesel tanks and 200kL double skinned diesel tanks at the bulk fuel facility and in-pit refueling respectively

Other Approvals

The Licence Holder has provided the following information relating to other SGE Project approvals as outlined in Table 2.

Table 2 – Relevant approvals

Legislation	Number	Approval
<i>Iron Ore (Hamersley Range) Agreement Act 1963 (WA)</i>	January 2014	State Agreement proposal submitted for the SGE project on 4 August 2016 to the Minister for State Development. Among other things, this proposal seeks approval to increase the approved production rate at Nammuldi (including Silvergrass) to 46mtpa. The current approved production rate for Brockman 2 is 10mtpa.
<i>Environmental Protection Act 1986 - Part IV</i>	Ministerial Statement 925 – Nammuldi-Silvergrass Expansion	Assessed by the Environmental Protection Authority under a Public Environmental Review level of assessment.
<i>Mining Act 1978</i>	G47/1242, G47/1243 and L47/647	Mining proposals
<i>Rights in Water and Irrigation Act 1914</i>	GWL107421(22)	Annual allocation of 55 GL. The Licence Holder has advised that this approval capacity is sufficient to provide for the proposed SGE works.
Dangerous Goods Site licences under the <i>Dangerous Goods Safety Act 2004</i>	Not yet issued	Fuel storage facilities

Process Description

Under this proposed amendment, the Licence Holder proposes amendments to three categories of activities at the prescribed premises.

Category 5 - Installation of a primary crusher and conveyor

SGE proposes to install a primary crusher at SGE and a conveyor linking SGE and Nammuldi.

The Licence Holder advised that the primary crushing module will receive 25mtpa to 30mtpa of predominately wet ore by means of haul truck tipping and feeding the ore to the run of mine bin and gyratory crusher. The vibrating grizzly will remove material less than 150mm and the gyratory crusher will reduce top size to less than 243mm. The product is then transferred to the conveyer and onto the Nammuldi Central Processing Plant.

The conveyor will cross over Duck Creek which is located within northern third of proposed conveyor (see Attachment 6 for proximate location – Duck Creek is not shown), however the Licence Holder has advised that a *Rights in Water and Irrigation Act 1914* bed and banks licence is not required for the works, as no permanent diversion or impact to flows to the creek is anticipated. At the southern end an elevated structure will lift the conveyor at the head end transfer to link up with the Nammuldi Central Processing Plant.

It is also proposed to increase the production rate for Nammuldi Central Processing Plant from 25mtpa to 46mtpa and to include the processing rate for Brockman 2 of 10mtpa so that the combined total processing rate will be 56mtpa.

The Licence Holder advised that the Nammuldi Central Processing Plant capacity has been doubled through the works associated with W5894/2015/1. The infrastructure is being commissioned and is expected to be completed by mid-October 2016.

The clearing of native vegetation for the project was approved under Ministerial Statement 925. Approximately 65 hectares for the installation of the infrastructure, with a further 22 hectares temporarily disturbed and will be rehabilitated following construction.

Category 64 – Construction of waste dump landfill

The Licence Holder has applied to construct a new waste dump landfill located in the north east of the premises boundary as shown in Attachment 8. The waste dump landfill is predominately for inert wastes and broken wooden pallets. It is proposed that the dump will accept rubber (conveyor belts including those on low grade steel spools, screen mats and tyres), inert plastic, concrete rubble and steel products that are unable to be recycled or otherwise disposed of.

Category 73 - Installation of additional fuel storage and refuelling infrastructure

The Licence Holder has advised that due to the increase in size of the mining fleet at SGE, additional fuel storage and refuelling infrastructure will be required. This will include the installation of a total capacity of 1320kL and 200kL double skinned diesel tanks at the bulk fuel facility and in-pit refueling respectively, increasing the total fuel storage by 1,520 kL. The Licence Holder has advised that a Dangerous Goods Licence under the *Dangerous Goods Safety Act 2004* will be obtained from the Department of Mines and Petroleum prior to the operation of the fuel storage facility. The in-pit refueling tank is planned to be temporary infrastructure during the construction of permanent SGE infrastructure.

The clearing of approximately one hectare of native vegetation will be required for the construction of the SGE fuel storage facility, which has been approved under Ministerial Statement 925.

Location, environmental siting and potential receptors

Table 3 below lists the relevant human receptors in the vicinity of the activities.

Table 3: Receptors and distance from prescribed activity

Residential and Sensitive Premises	Distance from Prescribed Activity
Tom Price	Approx. 70km south-east of Brockman 2 Nammuldi mine sites

Table 4 below lists the relevant environmental receptors in the vicinity of the activities.

Table 4: Environmental receptors and distance from prescribed activity

Environmental receptors	Distance from Prescribed Activity
Duck Creek	Intersects top third of proposed SGE conveyor
Caves Creek	Approx. 2km north of proposed SGE in-pit refueling tank and approx. 2.3km north of the waste dump landfill

threatened ecological community (TEC) – Themeda grasslands on cracking clays	Approx. 2km west of proposed SGE in-pit refueling tank and approx. 2km west from the waste dump landfill
Priority ecological community (PEC) – Brockman Iron cracking clay communities (P1)	Adjacent to the boundary of the Premises (small portion falls within and approx. 500m west from the waste dump landfill)
Mt Brockman	Approx. 13km south of SGE
Palm Springs	Approx. 26km downstream of SGE

Risk assessment

Tables 5 and 6 below apply a basic risk assessment to the potential emissions which may arise from the amendment application. Both tables identify whether these emissions present a material risk requiring regulatory controls.

Table 5. Risk assessment for proposed amendments during construction

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Material risk	Reasoning
Source	Cat 5 Processing or beneficiation of metallic or non-metallic ore	Construction of crushing infrastructure and conveyor,	Dust: associated with construction activities	Riparian vegetation within Duck Creek	Air: Particulate matter (dust)	Smothering of vegetation, sedimentation	No	<p>The Delegated Officer considers that the distance to human receptors is too far for health impacts to arise</p> <p>Given the distance, works are not likely to impact the TEC or PEC</p> <p>Works on the construction of the conveyor to be undertaken adjacent to, and over, Duck Creek. Impacts to Duck Creek have been considered in Ministerial Statement 925</p> <p>Dust and atmospheric emissions were not considered Key Environmental Factors as part of the Part IV approvals process, noting that dust can be controlled through management measures. The Licence Holder has advised that clearing will be restricted to areas required for process and construction related activities</p> <p>Vegetation health was considered in the Ministerial Statement and the Licence Holder is required to monitor impacts to Duck Creek through Part IV monitoring and management plans and it is considered that any impacts through dust during construction of the conveyor are likely to be captured through these requirements</p> <p>Pilbara vegetation tends to be well adapted to cope with the impact of dust deposition. The Delegated Officer considers that dust may impact upon plant health but is unlikely to cause the death. Therefore, the Delegated Officer considers that the consequence is insignificant</p> <p>The Delegated Officer considers that, based on the short term nature of the construction activities, adverse impacts on vegetation survival will be rare</p> <p>The Delegated Officer therefore considers the overall risk of dust emissions to be low</p>
			Noise: associated with construction activities	N/A	Air: Noise generated by the operation of equipment	N/A	No	The Delegated Officer notes the lack of sensitive receptors and determines that there is no risk of noise impacts
			Waste: associated with seepage, leaks and spills of waste during construction	Terrestrial ecosystems – surface water, Duck Creek	Land and waters: Stormwater runoff into surface water, sumps and sedimentation ponds prior to discharge into the environment	Waste: Terrestrial ecosystem; Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems	Yes	<p>Stormwater runoff - located adjacent to Duck Creek</p> <p>Groundwater - Not within a public drinking water source area</p> <p>The Delegated Officer has determined that these emissions may have minor and short term impacts to sensitive ecosystems and considers the consequence to be moderate. The Delegated Officer considers that minor and short term impacts to sensitive ecosystems may occur and has determined the likelihood to be possible</p> <p>Therefore the overall risk of discharge to land associated with leaks and spills from storage, process and handling areas on potential receptors during construction and operation to be moderate</p>
	Cat 64 Class II putrescible landfill site	Construction of SGE Waste dump landfill	Dust: associated with construction activities	Terrestrial ecosystems – PEC/TEC	Air: Particulate matter (dust)	Smothering of vegetation, sedimentation	No	The Delegated Officer notes that the boundary of the TEC is approximately 2km and the PEC approx. 500m from the proposed waste dump landfill site. Dust emissions generated during construction may impact upon the PEC. However, as the landfill is situated within the footprint which has received approval through Ministerial Statement 925, including the clearing of the portion of the PEC within the footprint, and the location of land dumps, the Delegated Officer considers that potential impacts of dust from the landfill are minor relative to the dust impacts from other activities near the PEC and TEC (including; open cut mine pits and waste dumps/topsoil/stockpiles)
			Noise: associated with construction activities	N/A	Air: Noise generated by the operation of equipment	N/A	No	The Delegated Officer notes the lack of sensitive receptors and determines that there is no risk of noise impacts
	Cat 73 Bulk storage of chemicals etc	Construction fuel storage tanks	Odour: associated with volatile fumes	N/A	Air: Odorous fumes	N/A	No	The Delegated Officer notes the lack of sensitive receptors and determines that there is no risk of odour impacts
Chemicals and wastes: associated with seepage, leaks and spills of hydrocarbons and waste during construction			Terrestrial ecosystems – surface water, Caves and Duck Creeks	Land and waters: Stormwater runoff into sumps and sedimentation ponds prior to discharge into the environment	Waste: Terrestrial ecosystem Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems	Yes	<p>Approximately 2km east of the known TEC and 500m east of the known from PEC. Given the distance, works are not likely to impact these communities</p> <p>Stormwater runoff – The in-pit refuelling tank is proposed to be located approximately 2km from Caves Creek and the fuel storage facility is proposed to be located approximately 3km from Duck Creek. The in-pit refueling tank will be less than 1000m³ and is planned to be temporary infrastructure during the construction of permanent SGE infrastructure</p> <p>Groundwater - Not within a public drinking water source area</p>	

Table 6. Risk assessment for proposed amendments during operation

		Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Material risk	Reasoning
Source	Cat 5 Processing or beneficiation of metallic or non-metallic ore	Operation of crushing infrastructure and movement of ore product via conveyor	Dust: associated with material storage, conveyors, crushing plant and vehicles on unsealed surfaces	Riparian vegetation within Duck Creek	Air: Particulate matter (dust) mainly consisting of iron oxides arising from the handling of ore	Smothering of vegetation, sedimentation	No Given the distance, works are not likely to impact the TEC or PEC Pilbara vegetation tends to be well adapted to cope with the impact of dust deposition. The Delegated Officer considers that dust may impact upon plant health but is unlikely to cause death. Therefore, the Delegated Officer considers that the consequence is insignificant The Delegated Officer considers that, the conveyor will be covered during operation and impacts to Duck Creek will be minor, therefore adverse impacts on vegetation survival will be rare The Delegated Officer therefore considers the overall risk of dust emissions to be low
			Noise: associated with ongoing crushing and conveying activities	N/A	Air: Noise generated by the operation of equipment	N/A	No The Delegated Officer notes the lack of sensitive receptors and determines that there is no risk of noise impacts
			Waste: associated with seepage, leaks and spills of waste from storage, process and handling areas	Terrestrial ecosystems – surface water, Duck Creek	Land and waters: Stormwater runoff into surface water, sumps and sedimentation ponds prior to discharge into the environment	Waste: Terrestrial ecosystem Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems	Yes As per Table 5, Category 5 for waste The Delegated Officer has determined that these emissions may have minor and short term impacts to sensitive ecosystems and considers the consequence to be moderate . The Delegated Officer considers that minor and short term impacts to sensitive ecosystems may occur and has determined the likelihood to be possible . Therefore the overall risk of discharge to land associated with leaks and spills from storage, process and handling areas on potential receptors during construction and operation to be moderate .
	Cat 64 Class II putrescible landfill site	Operation of SGE waste dump landfill – accepts rubber, wooden packaging, broken wooden pallets, inert plastic, concrete rubble and steel products	Dust: associated with operation activities	Terrestrial ecosystems - TEC	Air: Particulate matter (dust)	Smothering of vegetation, sedimentation	No The Delegated Officer notes that the boundary of the PEC is approximately 500m from the proposed waste dump landfill site and dust emissions generated during construction may impact upon this PEC. However, as the landfill is situated within the footprint which has received approval through Ministerial Statement 925, including the clearing of the portion of the PEC within the footprint, and the location of land dumps, the Delegated Officer considers that potential impacts of dust from the landfill are minor relative to the dust impacts from other activities near the PEC and TEC (including; open cut mine pits and waste dumps/topsoil/stockpiles)
			Noise: associated with operation activities	N/A	Air: Noise generated by the operation of equipment during construction	N/A	No The Delegated Officer notes the lack of sensitive receptors and determines that there is no risk of noise impacts
			Waste: associated with deposited waste	Groundwater	Land and waters: Contaminated stormwater	Waste: Terrestrial ecosystem Public health (drinking water) Surface water ecosystems Groundwater dependent ecosystems	Yes Stormwater runoff and windblown rubbish – waste dump landfill located approximately 2km west from the known TEC and 500m from the known PEC Groundwater - Not within a public drinking water source area. Depth to groundwater is approximately 8-13m The Licence Holder proposes the following: <ul style="list-style-type: none">• That no windblown waste is expected to be generated given the types of wastes accepted• Approved waste will be covered regularly• Signage to be erected to display waste types to be accepted
	Cat 73 Bulk storage of chemicals etc	Ongoing storage of a total of 20,260m ³ of fuel at the Premises	Pathogen: Vermin	N/A	Land and Air: through scavenger avian and ground dwelling fauna.	N/A	No Waste is inert and unlikely to attract high levels of vermin. No nearby sensitive receptors that are likely to be impacted by vermin
			Odour: associated with volatile fumes	N/A	Air: Odorous fumes	N/A	No The Delegated Officer notes the lack of sensitive receptors and determines that there is no risk of odour impacts
			Chemicals: associated with hydrocarbon transfer and storage areas Waste: from	Terrestrial ecosystems – surface water, Caves and Duck Creeks	Land and waters: Stormwater runoff into sumps and sedimentation ponds prior to discharge into the environment	Waste: Terrestrial ecosystem Public health (drinking water)	Yes Given the distance, works are not likely to impact the TEC or PEC Stormwater runoff – The in-pit refuelling tank is proposed to be located approximately 2km from Caves Creek and the fuel storage facility is proposed to be located approximately 3km from Duck Creek. The in-pit refueling tank will be less than 1000m ³ and is planned to be temporary

			Potential Emissions	Potential Receptors	Potential Pathway	Potential Impacts	Material risk	Reasoning
			<p>stormwater ponds, sumps. Water discharge, potentially containing minor levels of residual hydrocarbon contamination</p> <p>Spills and leaks from failure to contain within hydrocarbons and other chemicals with storage areas</p>		<p>Runoff collected in oily-water sumps and treated via oily water separator systems. May become mixed with general runoff depending on site segregation controls</p>	<p>Surface water ecosystems</p> <p>Groundwater dependent ecosystems</p>		<p>infrastructure during the construction of permanent SGE infrastructure</p> <p>Groundwater - Not within a public drinking water source area</p> <p>The Licence Holder proposes the following:</p> <ul style="list-style-type: none"> • 12 tanks to have storage level monitoring systems • Diesel pipework to be installed above ground and away from high traffic areas and protected by windrows and bollards • Concrete hardstands to capture hydrocarbon spills and prevent stormwater run-off • Fuel unloading and refueling bays to drain to central sump for treatment through an oily water separator to be used for dust suppression • Oily water separator specifications are expected to meet at least 30 mg/L total recoverable hydrocarbons, with treated water used for dust suppression on site

Decision

The Delegated Officer has determined that the key emissions associated with the proposed works are discharge to land through contaminated stormwater and hydrocarbon spills during construction. The key emissions during the operation of the primary crusher, conveyor, waste dump landfill and fuel storage facilities are discharge to land.

The Delegated Officer considers that the additional noise, dust and odour contribution will not result in a material increase in emissions from the Premises generally due to the distances to sensitive receptors and requirements through Ministerial Statement 925 to monitor impacts to riparian vegetation health.

Licence Holder controls for the construction of the facilities are conditioned on the licence to ensure that stormwater management, surface water and soil contamination, and impacts to groundwater are captured during construction. Conditions 5, 6, 9, 10, 11, 20, 21, 22 and 23 currently on the licence capture operational emissions relating to the stormwater contamination and hydrocarbon spills. Conditions 5, 10 and 20 have been updated to include the new waste dump landfill infrastructure.

A detailed risk review of the licence is being undertaken to align the licence with the DER's new approach towards risk based regulation. Once finalised, this amendment will be included into the revised licence. Changes to the conditions imposed under this Amendment Notice may occur as part of the review.

Amendment History

Table 4 provides the amendment history for L5258/1991/11.

Table 4 – Licence amendments

Instrument	Issued	Amendment
L5258/1991/11	26 May 2011	Licence re-issue
L5258/1991/11	26 May 2016	Amendment to expand the prescribe premises boundary to include new activities associated with Nammuldi; increase the design capacity for Category 5, 12, 54, 64 and 73; include the Brockman waste water treatment plant and fuel hub; include the Nammuldi landfill and remove the Pit 5 dewatering discharge point.
L5258/1991/11	18 October 2016	Amendment Notice 1 Including SGE project crusher, conveyor and fuel storage facilities.

Licence Holders Comments

The Licence Holder was provided with the draft Amendment Notice on 29 September 2016. Comments received from the Licence Holder have been considered by the Delegated Officer shown through Appendix 2.

Amendment

1. Condition 5 to be amended by the insertion or deletion of the red text shown in underline and strikethrough below:

STORMWATER MANAGEMENT

The Licensee shall install and maintain mechanisms and facilities detailed in Condition 10, to ensure that stormwater from the following areas, is diverted ~~to~~ facilities for treatment and disposal or reuse:

- (a) Process plants;
- (b) Washdown bays;
- (c) Refuelling areas;
- (d) Mechanical workshops.
- (e) Primary crushing plant shown in Attachment 9 as Figure 1; and
- (f) Fuel Storage Facility shown in Attachment 9 as Figure 2.

2. Condition 10 to be amended by the insertion or deletion of the red text shown in underline and strikethrough below:

The Licensee shall have in place, utilise and maintain protective bunding, skimmers, silt traps, neutralisation pits, fuel and oil traps, drains and sealed collection sumps to enable recovery of spillage and protection of surrounding soils and groundwater around the facilities below:

- (a) Process plants;
- (b) Maintenance workshops;
- (c) Laboratory;
- (d) Primary crushing plant shown in Attachment 9 as Figure 1;
- (e) Fuel Storage Facility shown in Attachment 9 as Figure 2; and
- (f) Power generation areas.

3. Condition 20 to be amended by the insertion or deletion of the red text shown in underline and strikethrough below:

MANAGEMENT OF WASTE DUMP LANDFILL (ATTACHMENTS 5 AND ATTACHMENT 8)

The Licensee shall bury the following types of waste within the waste dump landfill facility:

- (i) Clean Fill as defined in the Landfill Definitions;
- (ii) Inert Waste Type 1 as defined in the Landfill Definitions;
- (iii) Inert Waste Type 2 (tyres only) as defined in the Landfill Definitions; and
- (iv) Wooden pallets.
~~as defined in the Landfill definitions.~~

4. Condition 28 to be added to the licence as below:

CONSTRUCTION OF SGE CONVEYOR, PRIMARY CRUSHER AND FUEL STORAGE FACILITIES

28. In relation to the construction of the SGE project infrastructure, the Licensee must construct the infrastructure in Column 1 of Table 3 at the Location specified in Column 2 in accordance with the Requirements set out in Column 3.

Table 3: Infrastructure Requirements Table		
Column 1	Column 2	Column 3
Infrastructure	Location	Requirements (design and construction)
Conveyor (linking SGE to Nammuldi) and Primary Crusher	Conveyor as highlighted pink on Attachment 6 SGE Primary Crusher as highlighted pink on Attachment 6	<ol style="list-style-type: none"> 1. Primary Crusher (containing run of mine bin, vibrating grizzly and primary crusher) - Constructed to ensure clean stormwater and potential sediment load run-off are separated. Proposed grading of the site and creation of earthen drain to divert clean stormwater away from the primary crusher (Attachment 9, Figure 1) 2. Primary Crusher - Earthen sedimentation / silt pond indicatively designed to contain a peak 1:10 year average recurrence interval (Attachment 9, Figure 3) 3. Graded site to direct clean stormwater away from conveyor 4. Primary Crusher – Sediment sumps (indicative capacity of 22m³ each), one concrete drive-in sump to be constructed within Primary Crushing facility (Attachment 9, Figure 1) and second at nearby transfer station, to allow capture and settling of sediment laden water from the process or washdown
SGE Fuel Storage Facility	SGE Fuel Storage Facility as highlighted pink on Attachment 7	<ol style="list-style-type: none"> 1. Constructed through grading of site and earthen bunding to ensure clean stormwater run-off and potential sediment loaded run-off are separated 2. Graded site to direct clean stormwater away from the Fuel Storage Facility 3. All tanks to have storage level monitoring systems with a high level alarm on fuel tanks to be set at 90% (of the safe fill level) for overflow protection

		<p>4. Diesel pipework to be installed above ground and away from high traffic areas and protected by windrows and bollards</p> <p>5. Concrete hardstands to capture hydrocarbon spills and direct stormwater or washwater runoff towards the central sump for treatment through an oily water separator (Attachment 9, Figure 2). The specifications of the oily water separator are expected to meet at least 30mg/L TRH.</p> <p>6. Fuel unloading and refueling bays will be adjacent to the fuel tanks to drain to central sump for treatment through the oily water separator (Attachment 9, Figure 2).</p>
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5. Condition 29 to be added to the licence as below:

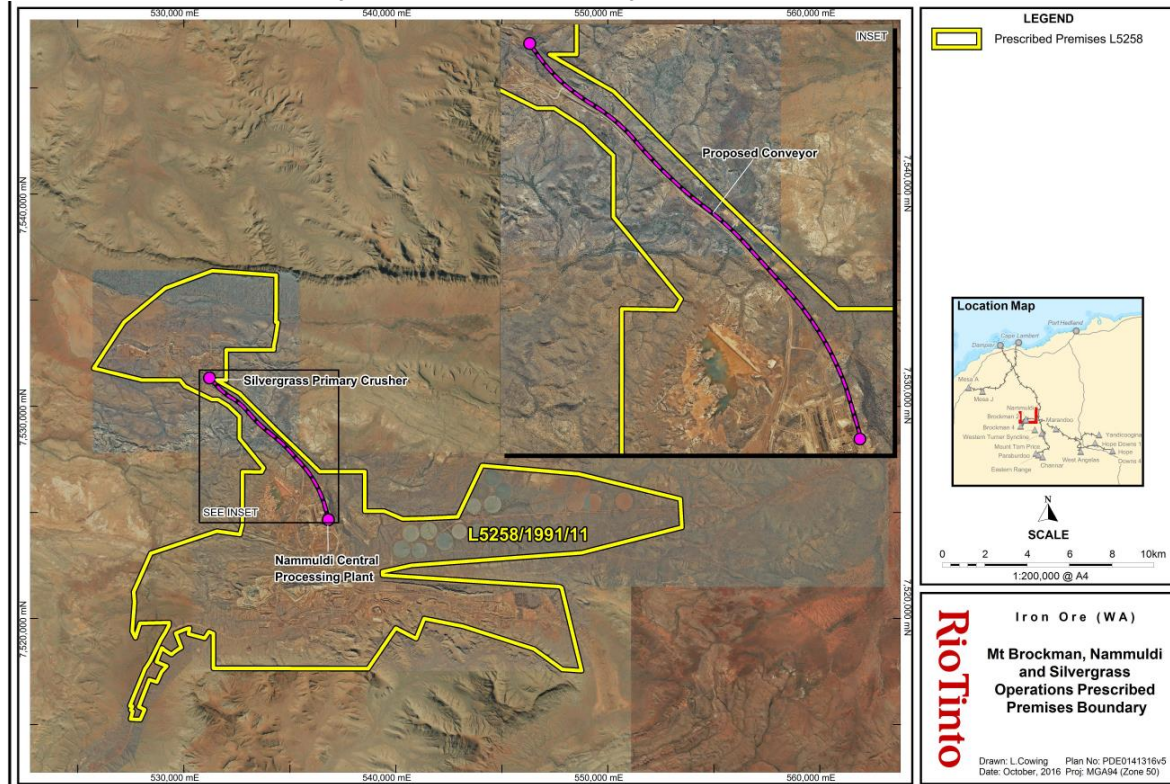
29. The Licensee must provide evidence that the infrastructure has been installed in accordance with the requirements specified in condition 28.

6. Condition 30 to be added to the licence as below:

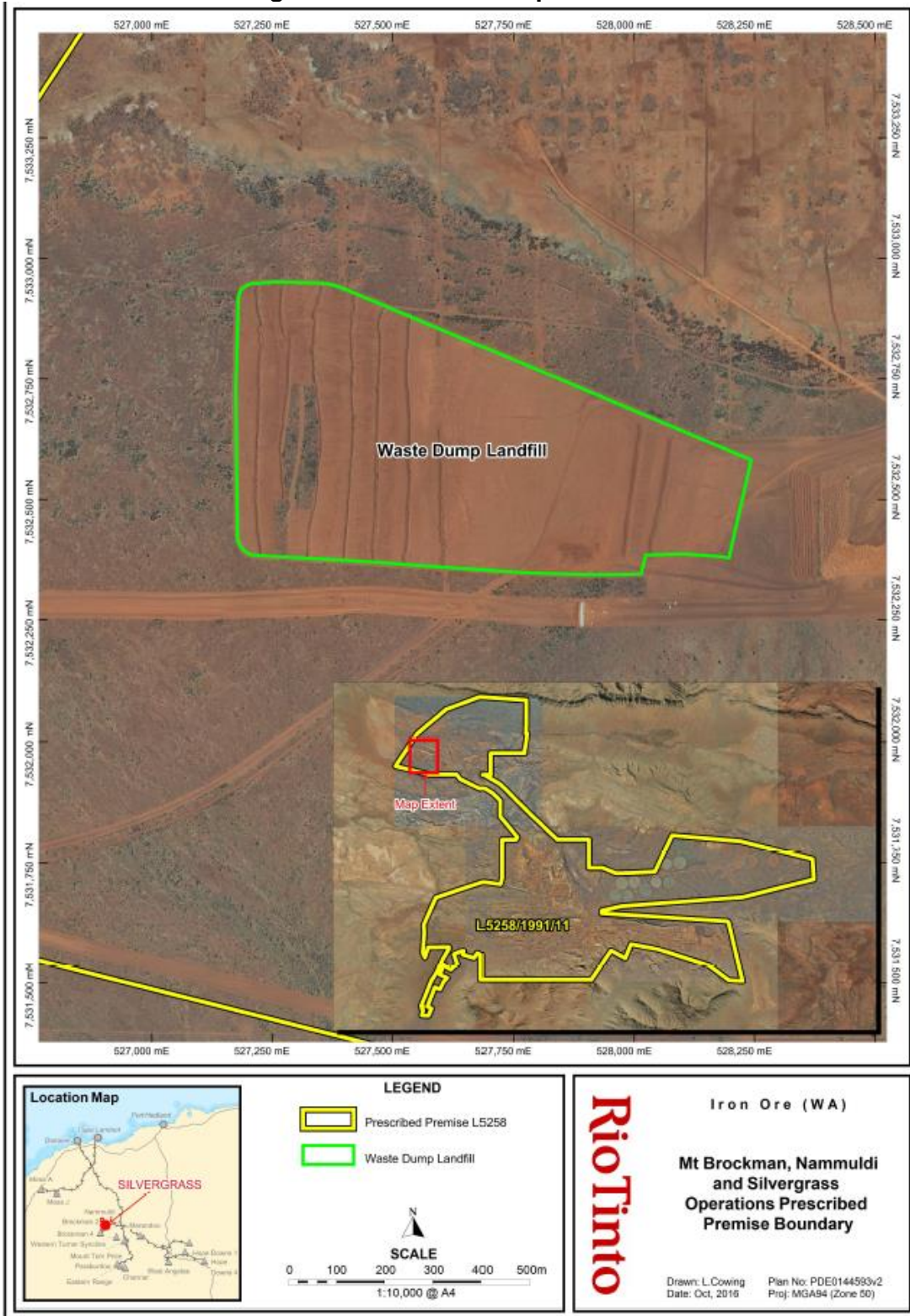
30. The Licensee must ensure that the infrastructure and equipment in Table 3 are maintained in good working order.

7. Attachment 6 to be added to the licence as below:

Attachment 6 – Primary Crusher and conveyor



Attachment 8 – Silvergrass East Waste Dump Landfill



10. Attachment 9 to be added to the licence as below:
Attachment 9 – Location and design of Amendment infrastructure

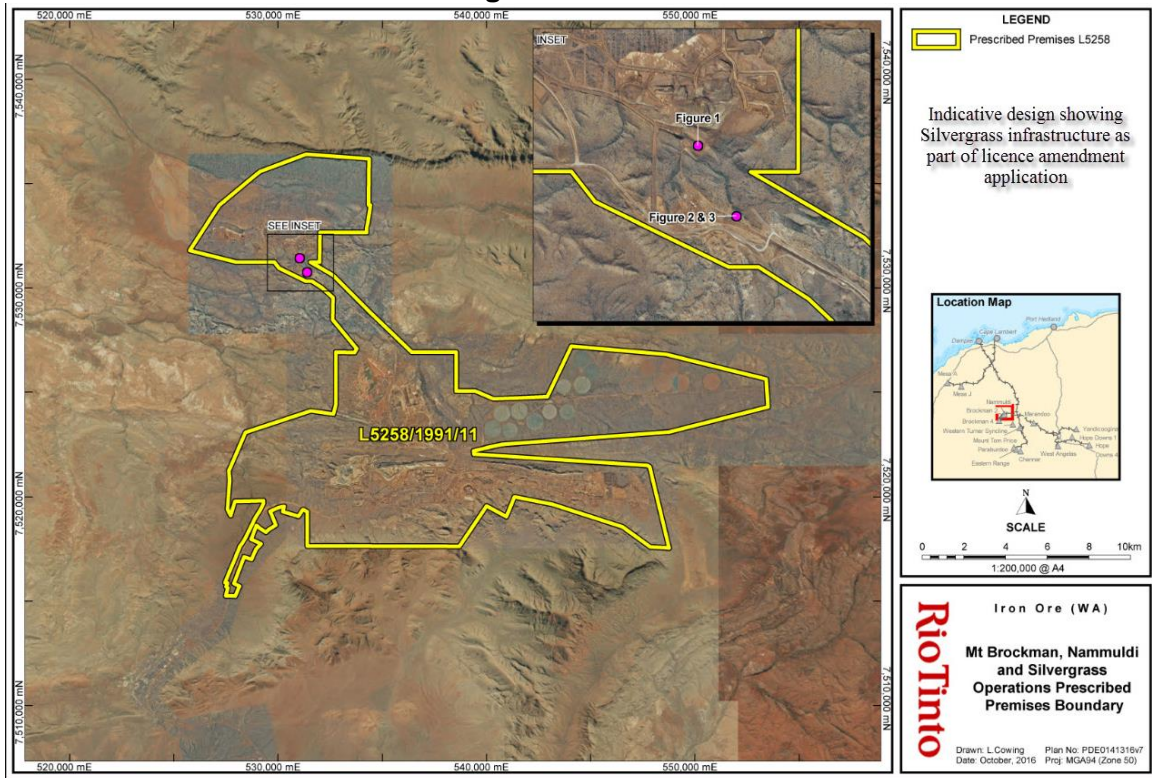


Figure 1 – Preliminary design figure depicting indicative sump location and capacity at the Primary Crusher

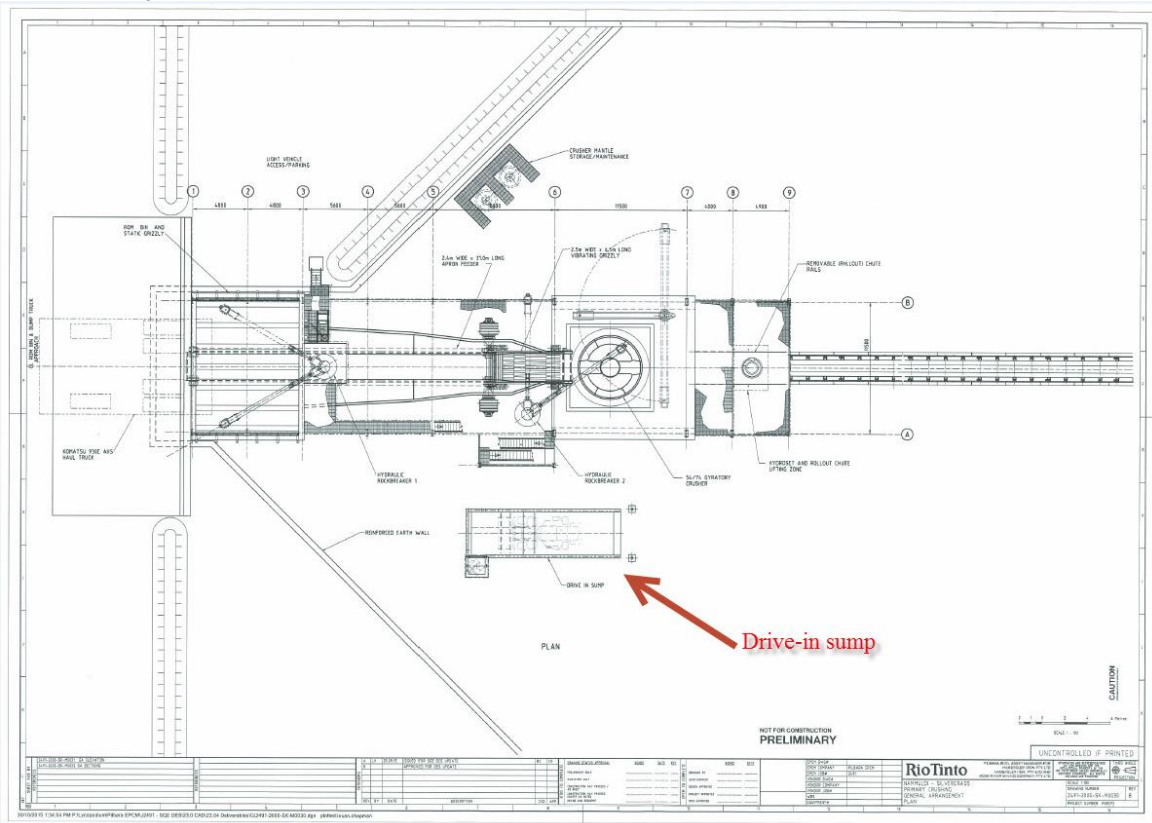


Figure 2 – Preliminary design figure depicting indicative sump location at fuel facility and indicative drainage channel and sediment basin locations

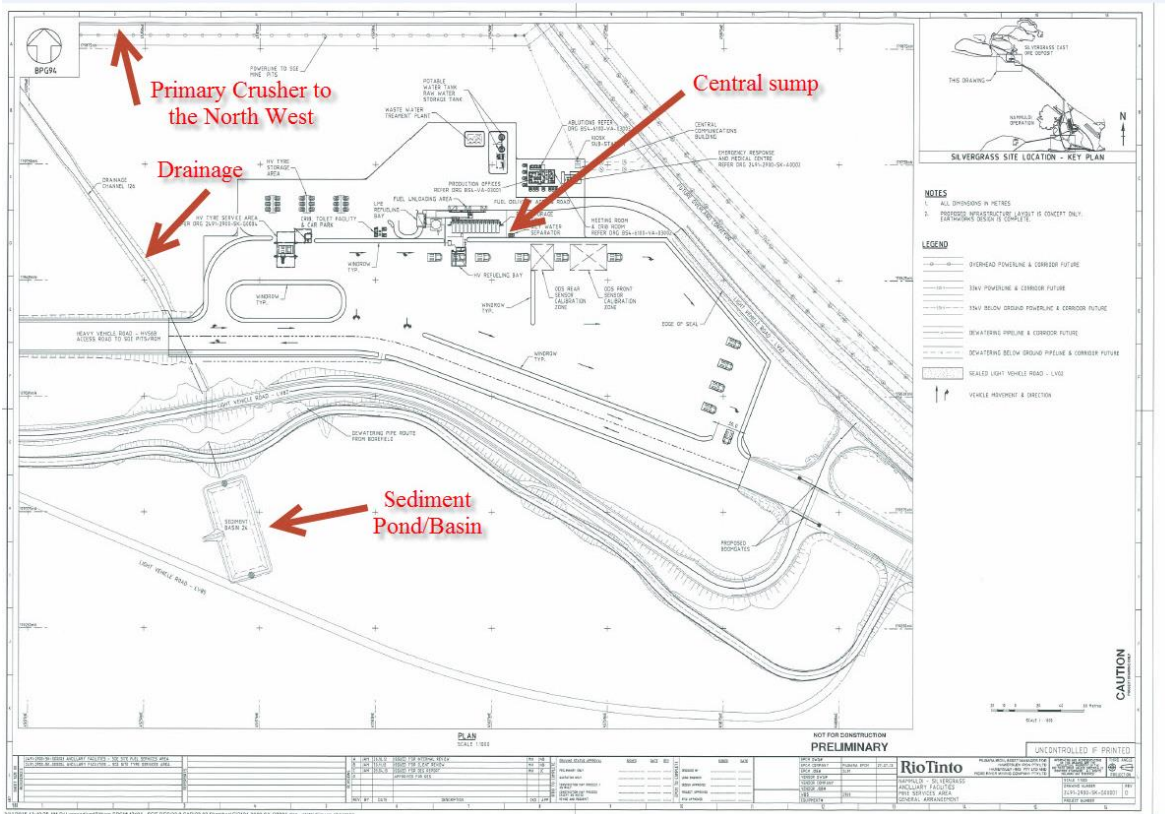
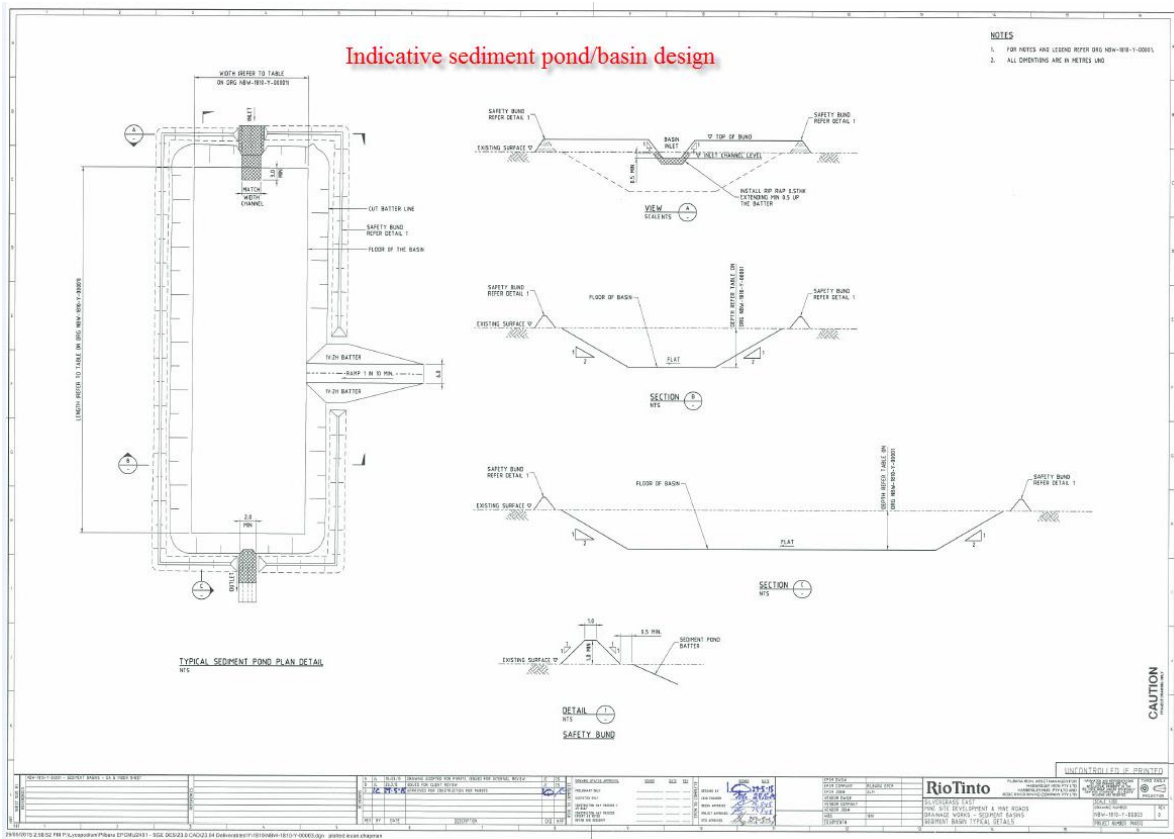


Figure 3 – Preliminary design figure depicting indicative sediment basin design and size



Appendix 1: Key Documents

	Document Title	Availability
1	DER, 2015, <i>Guidance Statement: Regulatory Principles</i> . Department of Environment Regulation, Perth.	https://www.der.wa.gov.au/our-work/regulatory-reform
2	DER, Sept 2015, <i>Guidance Statement on Setting conditions</i> . Department of Environment Regulation, Perth.	
3	DER, Nov 2014, <i>Guidance Statement on Licence duration</i> . Department of Environment Regulation, Perth.	
4	DER, Sept 2015 <i>Guidance Statement on Licensing and works approvals processes</i> . Department of Environment Regulation, Perth.	
5	EPA, Nov 2012, <i>Nammuldi-Silvergrass Expansion Project – Hammersley Iron Pty Ltd. Report 1457</i> . Environmental Protection Authority, Perth	http://edit.epa.wa.gov.au/EPADocLib/Rep%201457%20Nammuldi-Silvergrass%20PER%20211112.pdf
6	Minister for Environment, Jan 2013, Statement No. 925: <i>Statement that a Proposal may be implemented (pursuant to the provisions of the Environmental Protection Act 1986) – Nammuldi Silvergrass Expansion</i> . Government of Western Australia, Perth.	http://edit.epa.wa.gov.au/EPADocLib/Statement%20No.%20925.pdf
7	RTIO, July 2016, <i>Licence Amendment Supporting Documentation. Mount Brockman and Nammuldi Iron Ore Mines – L5258/1991/11. Silvergrass Fuel Storage Facility and Silvergrass Primary Crusher and Conveyor</i> . Rio Tinto Iron Ore, Perth. Received 4 August 2016	DER Records (A1145006 and A1144999)
8	RTIO, July 2016, Resubmission of <i>Licence Amendment. Mount Brockman and Nammuldi Iron Ore Mines – L5258/1991/11. Silvergrass Fuel Storage Facility and Silvergrass Primary Crusher and Conveyor</i> . Rio Tinto Iron Ore, Perth. Received 9 August 2016	DER Records (A1175247)
10	DER request for clarification of supporting information, and Rio Tinto provision of information required, 15 September 2016	DER Records (A1171145)
11	DER notification of proposed amendment, 29 September 2016	DER Records (A1171142)
12	RTIO, October 2016, Comments on draft 21 day Amendment Notice, 4 October 2016	DER Records (A1175249)
13	RTIO, October 2016, Additional information provided for Amendment Notice, 13 October 2016	DER Records (A1179234 and A1179235)

Appendix 2: Summary of Licence Holders comments

Comments received	Environmental risk	DER consideration of risk:
Rio Tinto initially requested not to include Silvergrass in the Premises name. On 13 October 2016, this request was retracted.	Nil risk – No change	Noted
Reference to the number of tanks and instead include total capacity of 1320kL at the bulk fuel storage facility and 200kL at the in-pit refuelling facility	Nil risk – Administrative change	Delegated Officer has considered and agreed to the change. Compliance with storage capacity will be obtained through annual audit compliance reporting
Inclusion of the waste dump landfill (Cat 64). Was included on original application submitted by Rio Tinto on 4 August, but excluded from the revised application submitted on 9 August 2016	Risk of waste impacts to the environment through emission through land and waters during operation.	Delegated Officer considered this risk can be appropriately managed through conditions on the licence. A risk assessment is provided in Tables 5 and 6
Removal of reference to Silvergrass primary crushing plant and Silvergrass fuel storage facility from Conditions 5 and 10 on the Amendment Notice. These are covered under the terms process plants and refuelling areas	Nil risk – Administrative change	Delegated Officer has considered and agreed to the change. Rio Tinto has provided maps under Attachment 9 that provide indicative locations and designs
Detailed designs for the infrastructure in Table 3 have not been finalised. The Licence Holder has provided further information and indicative locations, capacity and design figures to append to the Amendment Notice.	The key emissions associated with the proposed works during construction are discharge to land through contaminated stormwater and hydrocarbon spills	The Delegated Officer considers that the inclusion of Conditions 28 - 30 provide for design and construction compliance and ensure that equipment and infrastructure is maintained in good working order. Figures provided by Rio Tinto to be appended to the Amendment Notice. Conditions 5, 6, 9, 10, 11, 20, 21 and 22 provide for impacts relating to waste. Therefore the risk can be appropriately managed through conditions on the licence
Removal of the in-pit refuelling tank from Table 3. This is ancillary temporary infrastructure required for construction at Silvergrass	Nil risk – Administrative change	Delegated Officer considered that the operational risks can be appropriately managed through conditions on the licence. A risk assessment is provided in Tables 5 and 6