Government of Western Australia
Department of Environment Regulation

Decision Document

Environmental Protection Act 1986, Part V

Proponent: **Argyle Diamonds Limited**

Licence: **L4459/1987/13**

Registered office:	Level 8 1 William Street PERTH WA 6000
ACN:	009 102 621
Premises address:	Argyle Diamond Mine Mining Tenements M259SA, L80/24, M80/53, L80/1 and M80/114 LAKE ARGYLE 6740
Issue date:	Thursday, 18 September 2014
Commencement date:	Saturday, 20 September 2014
Expiry date:	Thursday, 19 September 2019

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:	Damian Thomas Licensing Officer
Decision Document authorised by:	Alana Kidd Manager Licensing

Contents

1 Purpose of this Document

This decision document explains how DER has assessed and determined the application for a works approval or licence, and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986.* Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

Works approval and licence conditions
DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.

2 Administrative summary

Administrative details		
Application type	Works Approval ☐ New Licence ☒ Licence amendment ☐ Works Approval amendment ☐	
Activities that cause the premises to become prescribed premises 57	**Category number(s)**	**Assessed design capacity**
	5	10,000,000 tonnes per year
	6	9,000,000 tonnes per year
	39	18,000 tonnes per year
	52	32 megawatts
	54	300 cubic metres per day
	57	More than 100 tyres per year
	64	5,000 tonnes per year
	73	3.7 million litres
Application verified Application fee paid	Date: 11/08/2014 Date: 15/08/2014	
Works Approval has been complied with Compliance Certificate received	Yes☐ No☐ N/A☒ Yes☐ No☐ N/A☒	
Commercial-in-confidence claim	Yes☐ No☒	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes☒ No☐	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986*?	Yes☒ No☐	Referral decision No: Managed under Part V ☒ Assessed under Part IV ☒
Is the proposal subject to Ministerial Conditions?	Yes☒ No☐	Ministerial statement No: 365 & 711 EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the *Environmental Protection Act 1986*)?	Yes☐ No☒ Department of Water consulted Yes ☐ No ☒	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes☐ No☒ If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements? Yes☐ No☒ If Yes, include details here, eg Site is subject to SO_2 requirements of Kwinana EPP.		

3 Executive summary of proposal

Argyle Diamonds Limited (ADL) is the world's largest supplier of diamonds, producing approximately 10 million carrots each year from its operations at Argyle Diamond Mine (ADM). ADL is a wholly owned subsidiary of Rio Tinto. Mining at ADL has historically included alluvial mining of creek beds from around 1983 onwards. Construction of the ADM began in 1984 and was commissioned in December 1985, which ADM still operates today, mining underground to recover diamonds from the AK1 lamproite pipe.

ADM processes approximately 10 million tonnes per year of diamond bearing lampriote ore to recover diamonds. Ore from the pit is delivered to the processing plant by haul trucks. Diamonds are then recovered in six stages:

1. The mined material goes through a primary crusher that reduces it to a maximum size of 150mm. Approximately 2,500 tonnes of ore is dumped into the primary crusher each hour. The secondary crusher's product is conveyed to the primary stockpile, which has a capacity of 10,000 tonnes.
2. The ore is extracted from the primary stockpile at a rate of 1,500 tonnes per hour. It is conveyed to high pressure rolls-crushers, where its maximum size is reduced to 30mm.
3. Ore is then scrubbed and screened and separated into three sizes. Oversized material (larger than 15mm) is further reduced, and undersized material (smaller than 1.5mm) is rejected to the tailings dump, as diamonds in this undersized ore cannot be extracted profitably. Ore between 1.5mm and 15mm is conveyed to a Heavy Media Separation (HMS) Plant Feed Stockpile.
4. The majority of the material in the HMS stockpile is lamproite ore. It contains diamonds and some other high density minerals. The ore is then processed in a cyclonic separation plant. Heavy media consisting of ferrosilicon powder mixed with water is used to separate the lamproite ore from the diamonds and heavy minerals which sink to provide a diamond rich concentrate.
5. In the recovery plant, the diamond concentrate is fed through a series of custom-designed x-ray sorters. Diamonds fluoresce when exposed to x-rays. Sensors detect the flashes of light emitted by the diamonds. These send signals to the microprocessor that fires an air blaster valve at the appropriate moment, blowing the diamonds into a collection box.
6. The diamonds are acid-cleaned, washed, weighed and transferred to Rio Tinto Diamonds' central sales and marketing organisation in Antwerp, Belgium where they are prepared for sale.

ADM has moved from Open Pit Mining to Underground Mining (UM) operations.

Tailing Storage facility
Tailings material from the processing of ore is deposited into the AK1 Tailings Storage Facility (TSF). Currently, coarse tailings are conveyed and then trucked to their final position for use in construction of the TSF wall (being constructed under W5213/2012/1). The fine tailings are pumped to the interior of the TSF for deposition. Surface water is decanted and used for process water and six of the seven TSF underdrains have been recaptured for re-use as process water.

Water Balance
Jacko's Dam was constructed to receive and collect seepage water from the Waste Rock Dump. Jacko's Dam also receives dewater from UM operations and some process water if required. Water from Jacko's Dam is used and recycled as process water. Reclaim Pond 2B receives decant water from the TSF and this water is used/recycled as process water as required.

Commented [TD1]: Argyle to confirm now that Underground has commenced.

Discharges from Jacko's Dam and Reclaim Pond 2B

Jacko's Dam and Reclaim Pond 2 B (RCP2B) discharge potentially contaminated process water and waste rock seepage water to the environment via spillways. Under licence conditions, ADM is required to monitor and sample the discharges to determine volumes and perform water quality analysis. The current ADM licence has trigger values for certain parameters in discharges from Jacko's Dam and RCP2B. If a trigger value is exceeded then ADM is required to undertake management measures and assess the environmental consequences of these discharge events. ADM has facilitated research studies into possible downstream environmental impacts from historical discharges from Jacko's Dam.

Dewatering

ADM undertakes a comprehensive dewatering program to allow the mining of ore from the UM operations. ADM has approval via a groundwater licence from Department of Water (DoW) to abstract up to 9 gigalitres of groundwater per year for dewatering purposes. Dewatered water is pumped either to Gap Dam or Jacko's Dam for storage and reuse but it is proposed to be directly pumped to the Process Plant in the near future.

Dewatering monitoring program

ADM performs a dewatering monitoring program across the mine site lease area whereby groundwater quality is monitored from locations in and around the AK1 pit and Underground development areas. Chemical properties are sampled and analysed approximately quarterly. Recent results from monitoring have shown the groundwater pumped from dewatering bores is fresh and neutral to weakly acidic, and is sodium, magnesium and bicarbonate type water. Water pumped from the AK1 Pit sump is comparatively more saline than groundwater pumped from bores and is neutral to weakly alkaline, but remains fresh and is of similar water type. It also has elevated levels of sulphate which is possibly due to runoff from the waste rock dumps. Higher levels of nitrates are due to the explosives activity and runoff into dewatering.

Chemical or Oil Recycling

ADM has an Oily Water Treatment Plant (OWTP) capable of treating 18,000 tonnes of oily waste per year. The OWTP receives liquid hydrocarbon wastes and water contaminated with hydrocarbons from around the site, including the AK1 Plant, Mine Workshop, Light Industrial Area (LIA) and Power Station, as well as from oil pods which collect oil from around site. The OWTP separates water from the hydrocarbons which are then transported off-site for disposal via tanker trucks. The separated water is recycled in the process plant.

The buffer pond is designed to contain wet season flows from a 1 in 10 year storm. Oily water pumps include a low range pump (1 litre per second (l/s)) designed for dry weather inflows and a high range pump (6 l/s) designed for wet season inflows. The oil separator is designed for oil separation down to 30 parts per million (ppm) (milligrams per litre (mg/L) equivalent) for Total Recoverable Hydrocarbons (TRH) at a flow rate of 6 L/s.

The treated water has the potential to be discharged into the environment as some process plant water may discharge through the Gap Creek sump, Jacko's Dam, AK1 TSF underdrains or RCP2B at the tailings storage facility. Discharge points are monitored on a regular basis for TRH. In the last five years there have been no concentrations of TRH above the laboratory detection limit (<0.1mg/L).

Electric Power Generation

ADM has a 32 megawatt (MW) diesel fuelled power station that currently consists of a total of 11 generators;

- 8 x 2.5 MW 645E4C/F4B @750 rpm Electro-Motive 20 Cylinder generators of GM make; and
- 3 x 4 MW Wartsila VASA 12V32 @750 rpm generators.

Diesel is initially supplied to the generators from the Bulk Fuel Storage Facilities, before being transported to a number of on-site tanks located at the power station. Waste oil from the power station is collected and pumped to the OWTP.

Air emissions monitoring program
To date, Argyle has done minimal air emissions testing of generators at ADM.

Sewage Facilities
ADM has a number of sewage facilities, including two domestic wastewater lagoon systems at each accommodation camp (Village and Wandarrie) and two tank treatment plants at each accommodation camp. The sewage facilities are described below:

1. Argyle Village Sewage Facility – a lagoon-style wastewater treatment plant that services the Argyle Village Accommodation Camp and restaurant facilities. This facility has four facultative ponds with a total surface area of 13,520 square metres;
2. Wandarrie Sewage Facility – another lagoon-style wastewater treatment plant that services the Wandarrie Village Accommodation Camp. This facility has three facultative ponds with a total surface area of 11,400 square metres;
3. The Wandarrie Wastewater Treatment Plant (Wandarrie WWTP) which is designed to treat around 171 cubic metres of wastewater per day (720 person camp). The Wandarrie WWTP is a package plant type system from which treated wastewater is either irrigated to land via a 2.2 hectares (ha) spray field or sent to the Wandarrie Sewage Facility lagoons for evaporation. The Wandarrie WWTP also has two 6m by 7m concrete sludge drying beds where leachate gravitates to a sump and is then pumped back into the primary tank of the WWTP; and
4. The Village Fly Camp Wastewater Treatment Plant (Fly Camp WWTP) which has a production design capacity of 80.4 cubic metres per day (120 person camp) and discharges treated wastewater to a 1.8ha irrigation area 200m south of the Fly Camp WWTP.

The size of the Wandarrie irrigation field is 2.2 ha while the size of the Fly Camp irrigation field is 1.8 ha and this ensures that nutrient loadings are consistent with the Department of Water's *Water Quality Protection Note 22 – Irrigation with nutrient rich wastewater* (2008.

Monitoring of WWTPs and Spray Irrigation Fields
Argyle undertakes the following monitoring at the Wandarrie WWTP and the Fly Camp WWTP and their associated irrigation spray fields:

- an elapsed time meter records monthly cumulative run times of treated wastewater discharged by the pump; and
- water quality samples are collected from the WWTP outlet pipe and analysed for pH, total suspended solids, biochemical demand, total nitrogen, total phosphorus and coliforms on a quarterly basis.

In addition to this Argyle conduct weekly inspections of the Wandarrie WWTP and the Fly Camp WWTP, pipeline and spray fields which will include:

- inspection of equipment, pumps and pipes for leaks, drips and/or damage;
- system levels and operating capacity including blockages and floating matter;
- water quality, including odours; and
- integrity of WWTP and pipelines.

Landfills
Putrescible waste is disposed of at a new landfill located east of the AK1 waste rock dump. The landfill is a trench style facility with an estimated throughput of around 1,000 tonnes per annum. Clinical waste is disposed of in a dedicated area at the landfill, separate from putrescible waste. Bore 44 is located 50m east of the landfill and is monitored to determine if there is any leachate moving away from the landfill area.

Argyle recycles waste materials including steel, non-ferrous metals, glass, rubber belting, batteries, empty drums, oil and paper.

Tyres are currently buried in the north and south west sections of the AK1 Waste Rock Dump. Tyres are buried in batches less than 100, are surveyed and documented on Argyles' GIS system. Other inert materials, such as used ventilation bags, Intermediate Bulk Containers (IBCs), old ammonium nitrate bags and concrete are also disposed of into a separate southern section of the Waste Rock Dump.

Bulk Fuel and Chemical Storage Facilities
The Argyle Diamond Fuel Compound (ADFC) is the major fuel storage facility at ADM. The ADFC is located on the eastern side on the mine site adjacent to the OWTP. The ADFC currently comprises two vertical tanks (1 and 2) each of 13.8 metres in diameter, 9.6 metres high and a capacity of 1,440 cubic metres (total capacity 2,880 cubic metres).

The tanks in the ADFC contain diesel fuel and are currently contained in a bunded area lined with a Geosynthetic Clay Liner (GCL) across the compound floor. Argyle has calculated that the storage capacity of the ADFC is around 2,680 cubic metres.

Bioremediation Facilities
ADM has a Bioremediation Facility (BF) and hydrocarbon-contaminated material is taken to the BF at the TSF. Hydrocarbon-contaminated material at the BF is sampled to determine treatment levels and disposed accordingly.

This licence has been issued on expiry of the previous licence L4459/1987/12 and incorporates a conversion of the existing operating licence to a new standardised REFIRE licence and conditions. During the conversion process, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. The premises has been reviewed on numerous occasions in recent licence issues and amendments. The Decision table outlines both the current licence conditions which have been incorporated into the REFIRE licence and additional standard conditions which have been added to the REFIRE licence.

4 Decision table

All applications are assessed under the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DER's *Corporate Policy Statement No.7- Operational Risk Management* and the risk matrix attached to this Decision Document in Section 6. Where other references have been used in making the decision they are detailed in the decision table.

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
General conditions	L1.3.3 L1.2.2 – 1.2.5 L1.3.1 – 1.3.2 L1.3.4 – 1.3.11 L1.2.3 & L1.2.5 L1.3.1 – L1.3.8	OSC N/A OSC	**Operation** Previous licence condition 15 (i) managed the application of treated wastewater to the irrigation areas and required that no ponding or surface run-off of wastewater occurs at the irrigation areas and has been converted to L1.3.3 to manage the Wastewater Treatment Plant (WWTP) Spray Irrigation Fields (SIF) at Fly Camp and Wandarrie. Previous licence condition 1 that relates to stormwater management has been converted to OSC L1.2.5 to ensure the Licensee reduces the potential for uncontaminated stormwater to become contaminated, and also to treat stormwater that does become contaminated prior to it being discharged to the environment. Previous licence condition 4 that ensures all installed dust collection and dust control systems are maintained to minimise dust has been converted to L1.2.2. Previous licence conditions 6, 7 and 8 relate to the construction of an oil water separator at the lower decline workshop. This has not been constructed so the conditions have been drafted onto the licence as L1.3.8, 1.3.9 and 1.3.10. Previous licence condition 9 that's relates to managing the BF has	General Provisions of the *Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
			been converted to L1.3.6. Previous licence condition 11 required the licensee to ensure that uncontaminated stormwater runoff is diverted away for the BF and has been converted to condition L1.2.5. Previous licence condition 12 which managed maintenance of the sewage wastewater treatment ponds has been converted into the licence condition L1.3.4. Previous licence condition 14 which managed maintenance of the effluent disposal channel has been converted into the standard licence condition L1.3.5. Previous licence condition 16 which directs tailing to the TSF has been converted to licence condition 1.3.2. Previous licence condition 17 allowed ADM to regularly undertake Emergency Response Training which includes burning certain materials in firefighting exercises and has been converted to L1.3.7 to allow this training to occur. Previous licence condition 18 required storage of environmentally hazardous materials and has been converted to licence condition 1.2.3. Previous licence condition 19 required storage of environmentally hazardous materials and has been converted to licence condition 1.2.3 and licence condition 1.3.11. Previous licence condition 20 required immediate recovery, removal	

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			and disposal of environmentally hazardous materials and has been converted to licence condition 1.2.4. Previous licence condition 21 required sludge removed from Imhoff tank, Wandarrie Treatment Plant and Argyle Village Treatment Plant to be stored at specific locations and has been converted to licence condition 1.3.2. Previous licence condition 22 required leachate from evaporation ponds referred to in condition 21 be managed such that leachate is contained within the ponds and is returned back to the wastewater treatment plant and has been converted to licence condition 1.3.2. Previous licence condition 23 required disposal of sewage sludge and has been converted to licence condition 1.3.1. Previous licence condition 24, 25 and 27 required specific types of waste be disposed to the landfill and has been converted to licence condition 1.3.1. Previous licence condition 26 required disposal of tyres and has been converted to licence condition 1.3.1. Previous licence condition 28, 29, 30, 31, 32, 33, and 34 regulated landfill management activities and has been converted to licence condition 1.3.1. Previous licence condition 36, 37, and 38 regulated storage of tyres above ground and has been converted to licence condition 1.3.1. Previous licence condition 39 required the licensee to undertake	

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			regular inspections of the tailings dam wall and have been converted to 1.3.12. Previous licence condition 40 required the licensee to maintain at least a 500mm freeboard in tailings dam has been converted to L1.3.2. Previous licence 50 required the maintenance of devices for measuring monthly cumulative volumes of all effluent discharged to the SIF and has been converted to licence condition 1.2.2. Conditions L1.2.1 is a standard licence condition.	
Emissions general	L2.1.1	OSC	**Operation** Previous licence condition 5 has a TRH limit of 15mg/L for all water discharged from the premises and this has been converted to licence has condition 2.3.2 . As the site has limits associated with discharges from the premises, OSC L2.1.1 has been included to require the licensee to record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of the Licence.	General provisions of the *Environmental Protection Act 1986* *Environmental Protection (Unauthorised Discharges) Regulations 2004* Existing licence conditions (L4459/1987/12)

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Point source emissions to air including monitoring	L2.2 and L3.2	N/A	**Operation** There are no significant point source air emissions including monitoring during operations at ADM. No specified conditions relating to point source emissions to air or the monitoring of these emissions are required to be added to the licence.	*Environmental Protection (Unauthorised Discharges) Regulations 2004* Application supporting documentation
Point source emissions to surface water including monitoring	L2.3.1 - 2.3.3 L3.3	N/A	**Operation** Previous licence condition 5 required a limit of 15mg/L for TRH in waters discharged from the premises and has been converted to licence condition 2.3.2. Previous licence condition 41 required monitoring of surface water quarterly for specific parameters at specific locations and has been converted to licence condition 2.3.1. Previous licence condition 44 provided targets for point source emissions to surface water and has been converted to licence condition 2.3.3.	*Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)
Point source emissions to groundwater including monitoring	L2.4	N/A	**Operation** There are no point source emissions to groundwater including monitoring during operation of the ADM. No specified conditions relating to point source emissions to groundwater or the monitoring of such emissions are required to be added to the licence.	N/A

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Emissions to land including monitoring	L2.5.1 and 2.5.2 L3.5.1	OSC	**Operation** Previous licence condition 13 required treated wastewater to only be discharged through discharge points and has been converted to licence condition 2.5.1. Previous licene condition 15(ii) required the application of treated wastewater to not exceed Total Nitrogen and Phosphorus loading rates and has been converted to licence condition 2.5.2. Previous licence condition 48 required the application of treated wastewater to the Fly Camp and Wandarrie SIF be monitored and has been converted to licence condition 3.5.1.	*Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)
Fugitive emissions	L2.6.1 – L2.6.2	OSC	**Operation** Previous licence conditions 2 and 3 regulated fugitive dust emissions and have been converted to licence condition 2.6.1 and 2.6.2.	*Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)
Odour	N/A	N/A	**Operation** There were no odour conditions on the previous licence for operations of the ADM. The landfilling activities and discharge of treated wastewater occur away from the mine camp. There are no	N/A

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			close sensitive receptors. As such, no specified conditions relating to odour or the monitoring of such emissions are required to be added to the licence.	
Noise	N/A	N/A	**Operation** Noise emissions will be generated by machinery movements (loader, trucks etc.) and crushing, screening and conveyor equipment during mining and ore handling operations. These emissions are expected to be localised to the immediate area. ADM is isolated and as such, noise is not expected to impact any sensitive receptors. No specified conditions relating to noise or the monitoring of such emissions are required to be added to the licence. ADM have a statutory responsibility to comply with the *Environmental Protection (Noise) Regulations 1997.*	*Environmental Protection (Noise) Regulations 1997*
Monitoring general	L3.1.1 – L3.1.4	OSC	**Operation** Monitoring is required for the surface water an groundwater monitoring bore samples and TRH at ADM. Previous licence condition 45 and 46 required all samples to be collected in accordance with relevant parts of AS5667 and submitted to a NATA accredited laboratory and has been converted to L3.1.1 and L3.1.2 in the licence to define sampling requirements the sampling frequencies required. Licence condition L3.1.3 and L1.3.4 are optional standard REFIRE conditions which have been included to require appropriate	*Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)

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Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
			calibration of monitoring equipment used on the Premises.	
Monitoring of inputs and outputs	L3.6.1	OSC	**Operation** Previous licence condition 42 required the monitoring of cumulative volumes discharged from monitoring locations such as AK1 TSF and has been converted to licence condition 3.6.1.	*Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)
Process monitoring	L3.7	N/A	**Operation** There is no process monitoring required during the operations at ADM. There are no specified conditions relating to process monitoring included in the licence.	N/A
Ambient quality monitoring	L3.8.1	OSC	**Operation** Previous licence condition 43 required surface water discharged from Jacko's Dam and RCP2B to be sampled within 72 hours of discharging and every fortnight thereafter and has been converted to licence condition 3.8.1. Previous licence condition 48 required groundwater bore 53 be monitored and has been converted to licence condition 3.8.1.	*Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)

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Meteorological monitoring	L3.9	N/A	**Operation** There are no specific conditions relating to meteorological monitoring during operations at ADM. There are no specified conditions relating to Meteorological monitoring included in the licence.	N/A
Improvements	L4.1	N/A	**Operation** There are no specific conditions relating to Improvements during operations at ADM. There are no specified conditions relating to Improvements included in this licence.	N/A
Information	L5.1.1 – 5.1.4 L5.2.1 – 5.2.3 L5.1.3	OSC	**Operation** L5.1.1 – 5.1.4 are standard conditions on REFIRE licences relating to record keeping requirements. Previous licence condition 10 required volumes and concentrations of hydrocarbon contaminated soils bioremediated at the BF to be provided in the Annual Environmental Report (AER) and has been converted to licence condition 5.2.1. Previous licence condition 35 require the licensee keep an accurate and up to date register of clinical waste disposed to the putrescible landfill and has been converted to licence condition 5.2.1. Previous licence condition 44 provided targets for point source emissions to surface water and if exceeded then a report was required to be submitted to the CEO and has been converted to	*Environmental Protection Act 1986* Application supporting documentation Existing licence conditions (L4459/1987/12)

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			licence condition 5.2.3. Previous licence condition 47 required all water quality monitoring required under the licence to be submitted in the AER and has been converted to licence condition 5.2.1. Previous licence condition 49 required the SIF nutrient loadings rates be submitted in the AER and has been converted to licence condition 5.2.1. Previous licence condition 51 required cumulative volumes of effluent discharged to the SIF to be submitted in the AER and have been converted to licence condition 5.2.1. Previous licence condition 55 required the submission of an AER and has been converted to L5.2.1 and L5.2.2. Condition L5.2.1 and L5.2.2 outline the requirements to submit to DER an annual environmental report detailing equipment failures / malfunctions, surface and groundwater monitoring results, complaints, and compliance and an assessment against previous reports and a list of original monitoring reports. Previous licence condition 56 required the submission of an annual audit compliance report and has been converted to L5.1.3 and 5.2.1. Previous licence condition 52, 53 and 54 required target exceedance reporting for target discharges to surface water and has been converted to licence condition 5.2.3. OSC L5.3.1 requires ADM to notify DER should any incident or	

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			malfunction occur on the premises that have the potential to cause pollution, or should an exceedance of any limit occur in relation to TRH limits.	
Licence Duration	N/A	N/A	The licence duration has not been changed as a result of this licence conversion.	

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
25/08/2014	Application advertised in West Australian	comments	N/A
08/08/2014	Proponent sent a copy of draft instrument	commnets	

6. Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High