NS Mining

Annual Return

ILUKA RESOURCES LIMITED

Licence 20795

A. Statement of Compliance - Licence Details

ALL Licence holders must check that the Licence details in Section A are correct.

If there are changes to any of these details, you must advise Environment Protection Authority (EPA) and apply as soon as possible for a variation to your Licence or for a Licence transfer.

Licence variation and transfer application forms are available on the EPA website at: http://www.epa.nsw.gov.au/licensing-and-regulation/licensing or from regional offices of the EPA, or by contacting by telephone 02 9995 5700.

If you are applying to vary or transfer your Licence, you must still complete and submit this Annual Return.

A1. Licence holder

Licence number : 20795

Licence holder : ILUKA RESOURCES LIMITED

Trading name (if applicable)

ABN : 34 008 675 018

ACN

Reporting period : From: 10-6-2021 To: 9-6-2022

A2. Premises to which Licence Applies (if applicable)

Common name (if any) : KARRA STATION

Premises : BALRANALD 2715 NSW

A3. Activities to which Licence Applies

Mineral processing Mining for minerals

A4. Other Activities (if applicable)

Waste processing

Waste disposal

A5. Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.



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Fee-based activity	Activity scale	Unit of measure
Mineral processing	> 30,000.00 - 100,000.00	T annual processing capacity
Mining for minerals	> 50,000.00 - 100,000.00	T annual production capacity

A6. Assessable Pollutants (if applicable)

Note that the identification of assessable pollutants is used to calculate the **load-based fee**. The following assessable pollutants are identified for the fee-based activity classifications in the licence:

B. Monitoring and Complaints Summary

B1. Number of Pollution Complaints

Pollution Complaint Category	Complaints
Air	0
Water	0
Noise	0
Waste	0
Other	0
Total complaints recorded by the licensee during the reporting period	0

B2. Concentration Monitoring Summary

For each concentration monitoring point identified in your licence, details are displayed below. If concentration monitoring is not required by your licence, **no data** will appear below. If data was provided from an uploaded file, the file name will be displayed below instead of any data. **Note** that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

Monitoring Point 1

Air quality monitoring, The dust gauge identified as Bal1 in the map and email attachment titled 'Bulk Sampling Activity Depositional Gauges - Location Plan' dated 27 May 2016 and kept on EPA file DOC16/230523

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	0	0	-	-	-

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Monitoring Point 2

Air quality monitoring, The dust gauge identified as Bal2 in the map and email attachment titled 'Bulk Sampling Activity Depositional Gauges - Location Plan' dated 27 May 2016 and kept on EPA file DOC16/230523

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	0	0	-	-	-

Monitoring Point 3

Air quality monitoring, The dust gauge identified as Bal3 in the map and email attachment titled 'Bulk Sampling Activity Depositional Gauges - Location Plan' dated 27 May 2016 and kept on EPA file DOC16/230523

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	0	0	-	-	-

Monitoring Point 4

Air quality monitoring, The dust gauge identified as Bal4 in the map and email attachment titled 'Bulk Sampling Activity Depositional Gauges - Location Plan' dated 27 May 2016 and kept on EPA file DOC16/230523

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	0	0	-	••	-

Monitoring Point 5

Air quality monitoring, The dust gauge identified as Bal5 in the map and email attachment titled 'Bulk Sampling Activity Depositional Gauges - Location Plan' dated 27 May 2016 and kept on EPA file DOC16/230523



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Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Particulates - Deposited Matter	grams per square metre per month	0	0	-	-	-

Monitoring Point 6

Groundwater quality monitoring, Groundwater well labelled UGM-M1D identified in Figure B and Table B-7 of the document titled 'Balranald Project, Groundwater Operating Strategy and Management Plan' dated 24 April 2016 and kept on EPA file DOC16/230523.

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Calcium	milligrams per litre	0	0	-	-	-
Chemical oxygen demand	milligrams per litre	0	0	-	-	-
Chloride	milligrams per litre	0	0	-	-	-
Depth	metres	0	0	-	-	-
Electrical conductivity	microsiemens per centimetre	0	0	-		
Iron	milligrams per litre	0	. 0	-	-	-
Magnesium	milligrams per litre	0	0	-	-	-
рН	pН	Ō	0	-		-
Potassium	milligrams per litre	0	0	-	-	-
Sodium	milligrams per litre	0	0	-	-	-
Sulfate	milligrams per litre	0	0	-	-	-
Sulfide (total)	milligrams per litre	0	0	-	-	-
Total alkalinity	milligrams of calcium carbonate per litre	0	0	-	-	-
Total dissolved solids	milligrams per litre	0	0 .		-	-

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Monitoring Point 7

Groundwater quality monitoring, Groundwater well labelled UGM-M2D identified in Figure 8 and Table B-7 of the document titled 'Balranald Project, Groundwater Operating Strategy and Management Plan' dated 24 April 2016 and kept on EPA file DOC16/230523.

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Calcium	milligrams per litre	0	0	-	-	-
Chemical oxygen demand	milligrams per litre	0	0	-	-	-
Chloride	milligrams per litre	0	0	-	-	-
Depth	metres	0	0	-	-	-
Electrical conductivity	microsiemens per centimetre	0	0		<u>.</u>	-
Iron	milligrams per litre	0	0	-	-	-
Magnesium	milligrams per litre	0	0	-	-	-
рН	рН	0	0	-	-	-
Potassium	milligrams per litre	0	0	-	-	-
Sodium	milligrams per litre	Ō	0	-	-	-
Sulfate	milligrams per litre	0	0	-	-	-
Sulfide (total)	milligrams per litre	0	0	-	-	-
Total alkalinity	milligrams of calcium carbonate per litre	0	0	-	-	-
Total dissolved solids	milligrams per litre	0	0	-	-	-

Monitoring Point 8

Groundwater quality monitoring, Groundwater well labelled UGM-M4D identified in Figure 8 and Table B-7 of the document titled 'Balranald Project, Groundwater Operating Strategy and Management Plan' dated 24 April 2016 and kept on EPA file DOC16/230523.



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Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Calcium	milligrams per litre	0	0	-	-	*
Chemical oxygen demand	milligrams per litre	0	0	-	-	-
Chloride	milligrams per litre	0	0	-	-	-
Depth	metres	0	0		-	-
Electrical conductivity	microsiemens per centimetre	0	0	-		-
lron	milligrams per litre	0	. 0	-	-	-
Magnesium	milligrams per litre	0	0	-	-	-
рН	рН	0	0	-	-	-
Potassium	milligrams per litre	0	0	-	-	-
Sodium	milligrams per litre	0	0	-	-	-
Sulfate	milligrams per litre	0	0	-	-	-
Sulfide (total)	milligrams per litre	0	0	-	-	-
Total alkalinity	milligrams of calcium carbonate per litre	0	0	-	-	-
Total dissolved solids	milligrams per litre	0	0	-	-	-

Monitoring Point 9

Groundwater quality monitoring, Groundwater well labelled BH-M16 identified in Figure 5.1 and Table 5.2 of the document titled 'Groundwater Management Plan - Bulk Sampling Activities, Balranald Mineral Sands Project' dated 22 October 2019 and kept on EPA file DOC20/269429.

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Calcium	milligrams per litre	0	0	-	-	-
Chemical oxygen demand	milligrams per litre	0	0	-	-	-



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Chloride	milligrams per litre	0	0	-	-	-
Depth	metres	0	0	-	-	-
Electrical conductivity	microsiemens per centimetre	0	0	-	-	-
Iron	milligrams per litre	0	0	-	-	-
Magnesium	milligrams per litre	0	0	-	-	-
pН	рН	0	0	-	-	-
Potassium	milligrams per litre	0	0		-	-
Sodium	milligrams per litre	0	0	-		
Sulfate	milligrams per litre	0 .	0	-		-
Sulfide (total)	milligrams per litre	0	0	-	-	-
Total alkalinity	milligrams of calcium carbonate per litre	0	0	-	. -	-
Total dissolved solids	milligrams per litre	0	0	-	-	-

Monitoring Point 10

Groundwater quality monitoring, Groundwater well labelled BH-M23 identified in Figure 5.1 and Table 5.2 of the document titled 'Groundwater Management Plan - Bulk Sampling Activities, Balranald Mineral Sands Project' dated 22 October 2019 and kept on EPA file DOC20/269429.

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Calcium	milligrams per litre	0	0	-	-	-
Chemical oxygen demand	milligrams per litre	0	0	-		-
Chloride	milligrams per litre	0	0	•	-	-
Depth	metres	0	0	-	-	-
Electrical conductivity	microsiemens per centimetre	0	0	-	-	-
Iron	milligrams per litre	0	0	-	-	-
Magnesium	milligrams per litre	0	0	-	-	-



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рН	рН	0	0	-	-	-
Potassium	milligrams per litre	0	0	-	-	-
Sodium	milligrams per litre	0	0	-	-	-
Sulfate	milligrams per litre	0	0	-	-	-
Sulfide (total)	milligrams per litre	0	0	-	-	-
Total alkalinity	milligrams of calcium carbonate per litre	0	0	-		-
Total dissolved solids	milligrams per litre	0	O		-	-

Monitoring Point 11

Groundwater quality monitoring, Groundwater well labelled BH-M24 identified in Figure 5.1 and Table 5.2 of the document titled 'Groundwater Management Plan - Bulk Sampling Activities, Balranald Mineral Sands Project' dated 22 October 2019 and kept on EPA file DOC20/269429.

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Calcium	milligrams per litre	0	0	-	-	-
Chemical oxygen demand	milligrams per litre	0	0	-	-	-
Chloride	milligrams per litre	0	0	-	-	-
Depth	metres	0	0	-	-	-
Electrical conductivity	microsiemens per centimetre	0	0	-	-	-
Iron	milligrams per litre	0	0	-	-	-
Magnesium	milligrams per litre	0	0	-	-	-
рН	pН	0	0	-	-	-
Potassium	milligrams per litre	0	0	-	-	-
Sodium	milligrams per litre	0	0	-	-	-
Sulfate	milligrams per litre	0	0	-	-	-
Sulfide (total)	milligrams per litre	0	0	<u> </u> -	-	-



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	milligrams of calcium carbonate per litre	0	0	-	_	-
Total dissolved solids	milligrams per litre	0	0	-	-	-

Monitoring Point 12

Groundwater quality monitoring, Groundwater well labelled BH-M25 identified in Figure 5.1 and Table 5.2 of the document titled 'Groundwater Management Plan - Bulk Sampling Activities, Balranald Mineral Sands Project' dated 22 October 2019 and kept on EPA file DOC20/269429.

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Calcium	milligrams per litre	0	0	-		-
Chemical oxygen demand	milligrams per litre	0	0	-	-	-
Chloride	milligrams per litre	0	0	-	-	-
Depth	metres	0	0	-	-	-
Electrical conductivity	microsiemens per centimetre	0	0	-	-	-
Iron	milligrams per litre	0	0	-		-
Magnesium	milligrams per litre	0	0	-	-	-
рН	рН	0	0	-	-	-
Potassium	milligrams per litre	0	0	-	-	-
Sodium	milligrams per litre	0	0	-	-	-
Sulfate	milligrams per litre	0	0		-	-
Sulfide (total)	milligrams per litre	O	0	-	-	- ,
Total alkalinity	milligrams of calcium carbonate per litre	0	0	-	-	-
Total dissolved solids	milligrams per litre	0	0	-	-	

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B3. Volume or Mass Monitoring Summary

For each volume or mass monitoring point identified in your licence, details are displayed below. If volume or mass monitoring is not required by your licence, **no data** will appear below. If data was provided from an uploaded file, the file name will be displayed below instead of any data. **Note** that this does not exclude the need to conduct appropriate volume or mass monitoring of assessable pollutants are required by load-based licensing (if applicable).

C. Statement of Compliance - Licence Conditions

C1. Compliance with Licence Conditions

Were all conditions of the licence complied with (including monitoring and reporting requirements)?	Yes
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D. Statement of Compliance - Load Based Fee Calculation

If you are not required to monitor assessable pollutants by your licence, no data will appear below.

If assessable pollutants have been identified on your licence, the following worksheets for each assessable pollutant will determine your load based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been already sent to you with your licence. If you require additional copies, you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

E. Statement of Compliance - Requirement to Prepare PIRMP

Have you prepared a Pollution Incident Response Management Plan (PIRMP) as required under section 153A of the Protection of the Environment Operations (POEO) Act 1997?				
Is the PIRMP available at the premises?				
Is the PIRMP available in a prominent position on a publicly accessible website?				
Address of the web page where the	ne PIRMP can be accessed ▼	"		
https://iluka.com/operations-res	source-development/engagement-hub/bairanald			
Has the PIRMP been tested?		Yes		
The PIRMP was last tested on 7-6-2022				
Has the PIRMP been updated?				



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The PIRMP was last updated on	7-6-2022	
Number of times the PIRMP was a	0	
The PIRMP was activated on		

F. Statement of Compliance - Requirement to Publish Pollution Monitoring Data

Are there any conditions attached to your licence that require pollution monitoring to be undertaken as required under section 66(6) of the Protection of the Environment Operations (POEO) Act 1997?	Yes	
Do you operate a website?	Yes	
Is the pollution monitoring data published on your website in accordance with the EPA's written requirements for publishing pollution monitoring data?		
Address of the web page where the pollution monitoring data can be accessed ▼		
https://iluka.com/operations-resource-development/engagement-hub/bairanald		

G. Statement of Compliance - Environment Management System and Practices

Do you have an ISO 14001 certified Environmental Management System (EMS) OR any other system that EPA considers is equivalent to the accountability, procedures, documentation and record keeping requirements of an ISO 14001 certified EMS?	No
Have you conducted an assessment of your activities and operations to identify the aspects that have a potential to cause environmental impacts and implemented operational controls to address these aspects?	Yes
Have you established and implemented an operational maintenance program, including preventative maintenance?	No
Do you keep records of regular inspections and maintenance of plant and equipment?	Yes
Do you conduct regular (at least yearly) environmental audits at the premises that are conducted by a competent and independent person?	No
Have you undertaken an independent environmental audit covering documented environmental practices, procedures and systems in place during the annual return period?	No
Have you established and implemented an environmental improvement or management plan?	Yes
Do you train staff in environmental issues that may arise from your activities and operations at the premises and keep records of this?	Yes

H. Signature and Certification

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This Annual Return may only be signed by person(s) with legal authority to sign it as set out in following categories: an Individual, a Company, a Public authority or a Local council.

It is an offence under section 66 of the Protection of the Environment Operations Act 1997 to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of \$250,000 for a corporation and \$120,000 for an individual.

IΛVIe

- declare that the information in the Monitoring and Complaints Summary in Section B of this Annual Return application is correct and not false or misleading in a material respect, and
- certify that the information in the Statement and Compliance in sections A, C, D, E, F, G and H and
 any other pages attached to Section C is correct and not false or misleading in a material respect.

Signature	707em	Signature	m.		
Name Tho	mas Joseph Patrick O'Leary	Name	Nigel George Tinley		
Position	Position MANKAING DIMECTER		COMPANY SECRETARY		
Date	4'8 '2022	Date	4 8 2022		
Declaration	1	Declaration			
Monitoring section B	nat the information in the and Complaints Summary in of this Annual Return is correct and r misleading in a material respect,	and Compl Annual Ret misleading	nat the information in the Monitoring aints Summary in section B of this turn is correct and not false or in a material respect, and		
of Complia any pages	at the information in the Statement nce in section A,C,D,E,F and G and attached to Section C is correct se or misleading in a material	Compliance pages attac	at the information in the Statement of e in section A,C,D,E,F and G and any ched to Section C is correct and not sleading in a material respect.		



NSW Environment Protection Authority

SUBJECT: Supporting information for air quality monitoring

A review of Iluka's obligations has identified an inconsistency in Iluka's air quality monitoring program and the Air Quality conditions of Licence 20795. In November 2019, EPA advised of no objection to Iluka's amended Environmental Management Plan – Bulk Sampling Activities (EMP) (dated October 2019). The EMP indicated a reduced air quality monitoring frequency of a once-off monitoring event at the completion of bulk-sampling activities, instead of ongoing monthly monitoring as specified by licence. Bulk sampling activities at Balranald ceased in 2020 and air quality monitoring data was presented in the 2020/2021 Annual return, in accordance with the frequency specified in the EMP. To rectify this inconsistency, a licence amendment application has been submitted to the EPA to remove air quality monitoring conditions which are no longer relevant to the site activities.

If you wish to discuss this matter further or require additional information please contact Brendan Isaacs.

Brendan Isaacs

Environmental Specialist

Iluka Resources Limited

Mobile 0455 470 233

Email Brendan.Isaacs@iluka.com