

## Annual Audit Compliance Report Form

*Environmental Protection Act 1986, Part V Division 3*

Section A – Licence details			
Licence number:	L8845/2014/1	Licence file number:	2014/002065
Licence holder name:	IB Operations Pty Ltd		
Trading as:	IB Operations Pty Ltd		
ACN:	165 513 557		
Registered business address:	Level 2 Hyatt Centre 87 Adelaide Terrace EAST PERTH WA 6004		
Reporting period:	01/01/2022 to 31/12/2022		

Section B – Statement of compliance with licence conditions
Did you comply with all of your licence conditions during the reporting period? (please tick the appropriate box)
<input type="checkbox"/> Yes – please complete: <ul style="list-style-type: none"> <li>• section C;</li> <li>• section D (if required); and</li> <li>• sign the declaration in Section F.</li> </ul>
<input checked="" type="checkbox"/> No – please complete: <ul style="list-style-type: none"> <li>• section C;</li> <li>• section D (if required);</li> <li>• section E; and</li> <li>• sign the declaration in Section F.</li> </ul>

Section C – Statement of actual production	
Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.	
Prescribed premises category	Actual production quantity
Category 5: Processing or beneficiation of metallic or non-metallic ore	0 tonnes (Stage 1 processing plant not operated)
Category 12: Screening, etc. of material	714,260 tonnes
Category 52: Electric power generation	0 MWe (Stage 1 power station not operated)
Category 54: Sewage facility	350 m <sup>3</sup> /day (daily average over the reporting period) 57,788 m <sup>3</sup> (annual total)
Category 77: Concrete batching or cement products manufacturing	80,916 tonnes (33,714 m <sup>3</sup> )

### Section D – Statement of actual Part 2 waste discharge quantity

Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.

Prescribed premises category	Actual Part 2 waste discharge quantity
Category 52: Electric power generation Emission points to air (A1 to A11)	N/A, Stage 1 power station not operated
Category 54: Sewage facility Emissions to land (WWTP - Irrigation Field)	490 m <sup>3</sup> /day (daily average over the reporting period) 80,886 m <sup>3</sup> (annual total)

### Section E – Details of non-compliance with licence condition

Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.

Condition no:	1.3.2	Date(s) of non-compliance:	See below.
---------------	-------	----------------------------	------------

Details of non-compliance:

Exceedances of condition 1.3.2 relating to the Japal Waste Water Treatment Plant (WWTP) and irrigation field are summarised in the table below. Monthly daily averages for the 2022 reporting period are provided as well as the number of days where exceedances were recorded (in brackets).

	Monthly daily averages		
	Input		Output
	Wastewater effluent (m <sup>3</sup> /day)	RO reject water (m <sup>3</sup> /day)	Irrigation field (m <sup>3</sup> /day)
<b>Licence limit:</b>	<b>585</b>	<b>140</b>	<b>725</b>
Jul*	344 (0)	160 (10)	511 (0)
Aug	348 (0)	182 (23)	529 (0)
Sep	352 (0)	119 (0)	476 (0)
Oct	369 (1)	132 (1)	506 (0)
Nov	382 (1)	114 (0)	495 (0)
Dec	304 (0)	124 (1)	437 (0)
<b>Annual daily average</b>	<b>350 (2)</b>	<b>136 (35)</b>	<b>490 (0)</b>

Highlights indicate where one or more non-compliance was recorded.

\*\*Note: July data provided from the Licence amendment date (20 July 2022) onwards

\*\*Note: Due to the nature of the irrigation tanks the daily volumes of RO reject water are blended with treated effluent and balanced over several days prior to discharge.

The daily limit (585 m<sup>3</sup>/day) of sewage accepted at the WWTP was exceeded on two days:

- 16 October – 770 m<sup>3</sup>/day
- 14 November – 620 m<sup>3</sup>/day

## Section E – Details of non-compliance with licence condition

The daily limit (140 m<sup>3</sup>/day) of Reverse Osmosis (RO) Plant reject water accepted at the WWTP prior to discharge to the irrigation field was exceeded 35 days total. The exceedances occurred on the following dates:

- 20 to 25, 28 to 31 July
- 1 to 21, 24, 25 August
- 27 October
- 22 December

All daily data values are provided in Appendix B attached.

What was the actual (or suspected) environmental impact of the non-compliance?

**NOTE** – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.

Despite the two exceedances of sewage accepted at the WWTP, all monthly daily averages, and the annual daily average (350 m<sup>3</sup>/day) were significantly below the Licence limit (585 m<sup>3</sup>/day). No environmental impact resulted from the exceedances.

Although the RO reject water accepted at the WWTP prior to discharge exceeded the Licence limit (140 m<sup>3</sup>/day) on 35 days throughout the reporting period, the annual daily average (136 m<sup>3</sup>/day), remained below the limit. Further to this the monthly daily averages generally remained below the limit (aside from July and August which were <15% and 30% above the limit respectively).

Due to the nature of the irrigation tanks the daily volumes of RO reject water are blended with treated effluent and balanced over several days prior to discharge to the irrigation field. Therefore, on days where excess RO reject water was accepted at the WWTP, the volume was sufficiently blended and diluted with treated effluent prior to discharge. No impact to the environment or the vegetation within the irrigation field was observed during the reporting period.



### Section E – Details of non-compliance with licence condition

**Cause (or suspected cause) of non-compliance:**

Operation of the RO treatment plant was affected by fouling of the membranes in July to August. This resulted in an increase in the volume of reject water produced and a number of exceedances of the 140 m<sup>3</sup>/day Licence limit.

Additionally, pressure on the WWTP was observed from overloading, evidenced with an increase in foaming throughout the tanks.

**Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:**

As mentioned above, pressure on the WWTP was observed from overloading. After consultation with Wastewater Services, the RO brine reject inflow was relocated from the front end of the WWTP to the back end. This process was reversed following a decrease in foaming and then reinstated again due to the foaming re-occurring. In September the RO reject was diverted directly to the irrigation tank, inclusive of a flowmeter. Only two exceedances of the RO reject daily limit were observed since this change was implemented (See October and December). Further to this, a proposal to amend the Licence to divert excess RO rejects for use in dust suppression is anticipated to be granted within the next reporting period.

**Was this non-compliance previously reported to DWER?**

Yes, and

Reported to DWER verbally

Date: / /

Reported to DWER in writing

Date: / /

### Section E – Details of non-compliance with licence condition

Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.

Condition no:	2.2.2	Date(s) of non-compliance:	July, August, September 2022
---------------	-------	----------------------------	------------------------------

Details of non-compliance:

Exceedances of condition 2.2.2 relating to the water quality monitoring at the irrigation field are summarised in the table below.

Monthly results for the 2022 reporting period show exceedances were recorded on spot samples collected between June and September for Biochemical oxygen demand (BOD), Total suspended solids (TSS) and Total nitrogen.

Month	pH (pH units)	BOD (mg/L)	TSS (mg/L)	TDS (mg/L)	Total N (mg/L)	Total P (mg/L)	E. coli (CFU per 100 mL)
Limit	6.5 to 8.5	20	30	2,000	30	8	1,000
Jul	8.0	18.0	68.0	860	27.0	5.4	<10
Aug	7.7	18.5	136.5	810	32.0	5.5	10
Sept	8.0	29.4	111.5	938	25.5	7.0	653
Oct	8.0	13.5	20.8	830	29.8	6.2	<10
Nov	8.0	16.0	<5	860	30.0	6.9	<10
Dec*	-	-	-	-	-	-	-

Highlights indicate where a licence limit exceedance.

\* Monitoring frequency is compliant with the licence requirements despite no sample taken in December as the licence requires quarterly monitoring only.

What was the actual (or suspected) environmental impact of the non-compliance?

**NOTE** – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.

Negligible environmental impact is anticipated from the exceedances, given the low level of exceedance and short timeframe in which the exceedances were recorded. No impact to the environment or the vegetation within the irrigation field was observed during the reporting period.



Section E – Details of non-compliance with licence condition	
Cause (or suspected cause) of non-compliance:	
<p>An internal incident (INC-100162) was raised when samples collected, returned results in exceedance of the Licence limits. An operational review was then undertaken to identify areas of concern and recommend improvement in the system.</p> <p>The on-site Infrastructure team identified issues with successive failure of parts of the WWTP aerator system, and a carryover of solids into the effluent tank.</p>	
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:	
<p>A review by both WISE and Waste Water Services confirmed the two issues mentioned above, and recommended cleaning of the effluent tanks. The system required some time to stabilise results, however, subsequent water quality results in October and November were brought within Licence limits.</p>	
Was this non-compliance previously reported to DWER?	
<input checked="" type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 19 / 08 / 22
<p>[Note: July exceedances were reported as part of W6602/2021/1 TLO report, submitted 19/08/2022.]</p>	

### Section F – Declaration

I / ~~We~~ declare that the information in this Annual Audit Compliance Report is true and correct and is not false or misleading in a material particular<sup>1</sup>.

I / ~~We~~ consent to the Annual Audit Compliance Report being published on the Department of Water and Environmental Regulation's (DWER) website.

Signature <sup>2</sup> :		Signature:	
Name: (printed)		Name: (printed)	
Position:	Manager Approvals Compliance	Position:	
Date:	30/03/2023	Date:	
Seal (if signing under seal):			

<sup>1</sup> It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

<sup>2</sup> AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the licence holder.