



Annual Audit Compliance Report Form

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to info@dwer.wa.gov.au, or to the below postal address:

Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919

Section A – Licence details			
Licence number:	L8148/2006/4	Licence file number:	2014/000374
Licence holder name:	KOOLAN IRON ORE PTY LTD		
Trading as:	KOOLAN IRON ORE PTY LTD		
ACN:	099 455 277		
Registered business address:	PO Box 55 WEST PERTH WA 6872		
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">• section C;• section D (if required); and• sign the declaration in Section F.
<input checked="" type="checkbox"/> No – please complete: <ul style="list-style-type: none">• section C;• section D (if required);• section E; and• sign the declaration in Section F.

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
5	2,446,303 tonnes
6	3,949,910 m ³
12	18,518 tonnes
54	84.45 m ³ per day
58	2,066,725 tonnes
64	1,447 tonnes
73	860 cubic meters

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
N/A	N/A

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:	1.3.5	Date(s) of non-compliance:	As per N1 forms submitted
Details of non-compliance:			
In two months of 2022, the influent volume to the sewage facility exceeded the premises design capacity of 100 m ³ /day. These slightly elevated rates meant that retention times in sewage treatment package plant chambers was less than design, but effluent production and disposal to land via licensed outlets (L1 and L2) were routinely made. The mean daily throughput rates were 115 m ³ in May 2022 and 105 m ³ for June 2022.			
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.			
No actual or potential impacts occurred. The final land disposal (by containment, evaporation and percolation) of daily volumes afforded treatment of wastewaters at the licensed premises. Monitoring of treated effluent quality was made and indicated treatment consistent with previous years. Refer to Annual Environment Report for other details supplied.			
Cause (or suspected cause) of non-compliance:			
These periods (May / June 2022) marked a steady increase in occupancy rates in camp to over 300 personnel, which had previously generally been maintained at less than 300 pax. This increase consequently correlated to elevated influent volumes to the sewage facility due to room accommodations and related activities at mess facilities.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Volume reducers were installed on shower heads in accommodation rooms at camp, which reduced the daily load into the WWTP in subsequent months of 2022 and village greywater was collected and sent to different septic systems elsewhere at site. As of 2023, many large projects have been completed and personnel have left site meaning the influent load has reduced to below design limit.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input type="checkbox"/> Reported to DWER verbally			
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 06 / 07 / 2022	

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:	2.2.3	Date(s) of non-compliance:	As per ET1 forms submitted
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Details of non-compliance:

Total suspended solids (TSS mg/L) recorded during monitoring of dewatering discharges at W1 (Settlement Pond) exceeded the limit (TSS > 20 mg/L) on five days during the reporting period (Table 1). Notifications to DWER were made under conditions 4.2.2 and 4.3.1. Quarterly ET1 reports were submitted in Q1, Q2 and Q4 to cover these days of exceedance. Discharge days in Q3 were all < 20 mg/L TSS for the entire period and a ET1 Form not required to be submitted. The average TSS concentration on days of emissions over the course of the year was 9.7 mg/L. The low frequency of days above 20mg/L, the low absolute TSS level and short overall time periods (non-sequential days) for those days means that the dewatering treatment system, compared with previous years, was working very well during 2022.

Table 1: Summary of TSS exceedances to W1 during 2022.

Emission Point Reference	Parameter	Target	Date	Result (TSS mg/L)
W1	TSS (mg/L)	20 mg/L	15/01/2022	24
W1	TSS (mg/L)	20 mg/L	08/03/2022	263*
W1	TSS (mg/L)	20 mg/L	10/03/2022	22
W1	TSS (mg/L)	20 mg/L	23/06/2022	30
W1	TSS (mg/L)	20 mg/L	29/12/2022	21

* Note: TSS value recorded on 8th March 2022 is believed to be an outlier that was obtained post flushing of sediment plugged in pipes and not representative of typical water quality being discharged through W1.

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.

No actual or potential impacts are known to have occurred. The mixing afforded at the licensed outlet diffuser (within the approved Low Ecological Protection Area of Statement 715) and tidal flushing accounts for full mixing of dewatering releases. KIO continues to monitor receiving water quality and environmental condition in accordance with Statement 715 Marine Management Plan. Refer to Annual Environment Report and other details supplied in Compliance Assessment Reports.

Cause (or suspected cause) of non-compliance:

At times, the rate of ingress into the Main Pit required high rates of dewatering and thereby elevated suspended solids levels in settlement pond influent was also high (> 20 and up to 30 mg/L TSS). When rates are higher the pond retention time is slightly less.

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

Section E – Details of non-compliance with licence condition

Daily sampling results that exceeded TSS limit were reported internally for review and action, and then to DWER on a quarterly basis as required under conditions 4.2.2 and 4.3.1 of the Licence. Corrective actions were implemented aiming to improve water quality.

Corrective actions undertaken in response to days of elevated TSS included:

- reducing pumping rates
- moving pumps to deeper water and pumps inlets to the sump surface
- changing mining activities that were potentially affecting water quality at the source
- suspending dewatering until TSS in source water had settled
- deploying curtain (silt) booms in the settlement pond to contain suspended solids

Longer-term methods are also being developed including consideration of further designs to pre-treat mine dewatering influent to the pond. If required, these may require a Works Approval or Licence amendment.

Was this non-compliance previously reported to DWER?

Yes, and

Reported to DWER verbally

Reported to DWER in writing

Date: 27 / 04 / 2022; 25 / 07 2022 and 31 / 01 / 2023

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:	3.3.1	Date(s) of non-compliance:	01 January – 31 March 2022
Details of non-compliance:			
Condition 3.3.1 stipulates monthly volumetric flow rate data at monitoring point M11 (Waste Water Treatment Plant). During the reporting period no volumetric flow meter data were recorded during January to March 2022.			
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.			
No actual or potential impacts occurred. As village occupancy rates were at their lowest over this timeframe throughout 2022 (less than the average annual occupancy rate of 300 personnel), it is highly unlikely that exceedances to the daily design capacity limit occurred. Refer to Annual Environment Report for other details supplied.			
Cause (or suspected cause) of non-compliance:			
Faults were identified in the flow meter resulting in a new meter installed. Delays in product acquirement and commissioning subsequently resulted in a three-month absence of data.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Regular maintenance and inspections of the flow meter occurs at M11 by site personnel to ensure defaults are picked up and fixed immediately without prolonged delays. Backup flow meters onsite are an option should a recurrence happen in the future.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input type="checkbox"/> Reported to DWER verbally			
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 31 / 03 / 2023	

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:	3.3.1	Date(s) of non-compliance:	30 / 03 / 2022
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Details of non-compliance:

Monitoring at the WWTP (M11) was completed for each quarter of 2022 as required under condition 3.2.1. However, *E. coli* (CFU/100 mL) was excluded from Q1 sample results PE159624 due to the sample being obtained by the lab outside acceptable temperature range. That is, the bacterial sample had not been properly kept chilled in transit from Koolan in the Kimberley to Perth SGS lab. Results for M11 Q1 are presented in Table 2.

Table 2: Wastewater Analysis Q1 2022 Village WWTP treated effluent from sample point (M11).

Date	Lab Reference	Biochemical Oxygen Demand (CBOD5) (mg/L)	Total Dissolved Solids (mg/L)	pH (pH units)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	E. coli (CFU/100mL)
30/03/2022	PE159624	6	890	7.6	70	9.8	N/A

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.

No actual or potential impacts are likely to have occurred. Treated wastewater continued to be sustainably irrigated to the paddocks by land disposal. These paddocks are isolated from personnel. The chlorination units were known to be working so bacterial load would have been treated. There was an error in correct testing for the bacterial parameter. Refer to Annual Environment Report for other details supplied.

Cause (or suspected cause) of non-compliance:

A resample for *E. coli* was not completed for M11 monitoring Q1 2022.

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

Revision of relevant MGX procedures to all relevant personnel to double-down on iced/chilled sample storage for long haul travel and to emphasize immediate resampling following rejection of inbound samples at the lab.

Was this non-compliance previously reported to DWER?

Yes, and

Reported to DWER verbally

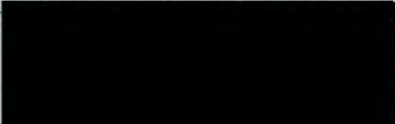
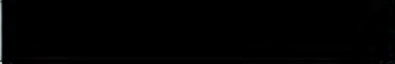
Reported to DWER in writing

Date: 31 / 03 / 2023

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 particular¹.

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

Signature ² :		Signature:	
Name: (printed)		Name: (printed)	
Position:	CEO	Position:	
Date:	31 / 03 / 2023	Date:	
Seal (if signing under seal):			

¹ 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.

² 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.