

23 March 2022

Chief Executive Officer
Department of Water and Environmental Regulation
Department Administering the *Environmental Protection Act 1986*
Locked Bag 10
JOONDALUP WA 6919

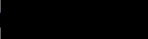
Email: compliance@dwer.wa.gov.au

Dear Sir/Madam

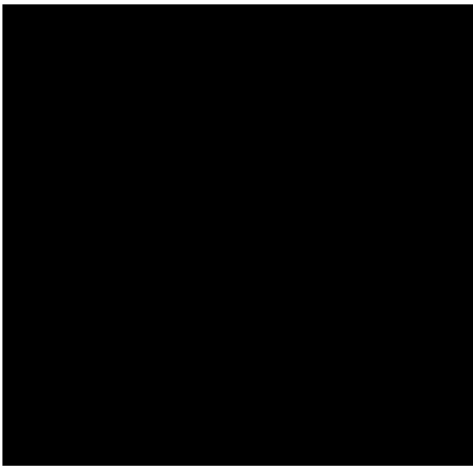
LICENCE L6217/1983/15: 2021 ANNUAL AUDIT COMPLIANCE REPORT SUBMISSION

Please find attached the Annual Audit Compliance Report (AACR) required by Condition G2 of Licence L6217/1983/15 for Wagerup Refinery.

The report covers the period from 1 January 2021 to 31 December 2021. Details of compliance are provided within the attached Report.

Please contact me on  if you have any questions or comments.

Yours sincerely





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:	L6217/1983/15	Licence file number:	2012/007237-7~2
Licence holder name:	[REDACTED]		
Trading as:	[REDACTED]		
ACN:	[REDACTED]		
Registered business address:	[REDACTED]		
Reporting period:	01 / 01 / 2021 to 31 / 12 / 2021		

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
Category 46 – Bauxite refinery Category 52 – Electric Power Generation	2,748,447 tonnes of refined alumina 672,542 MWhr total or average 77MW per day of power generated using natural gas
Category 64 – Class II or III putrescible landfill site Category 67 – Fuel burning	640 Tonnes to Class II landfill 40,850 kg/hr (natural gas with Sulphur content less than or more than 0.25%)

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 46 - Bauxite refinery	5,464,714 tonnes of bauxite residue (tailings)

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:	G1 (ii)	Date(s) of non-compliance:	Q1 sampling events: 6/01/2021, 29/01/2021, 11/02/2021, 23/02/2021, 24/02/2021, 25/02/2021, 27/02/2021, 15/03/2021 Q2 sampling events: 27/04/2021, 29/04/2021, 30/04/2021, 6/05/2021, 7/05/2021, 12/05/2021, 28/06/2021 Q3 sampling events: 14/07/2021, 15/07/2021, 19/07/2021, 15/09/2021, 23/09/2021
Details of non-compliance:			
Alcoa contracts an independent stack emission testing company, who are accredited by the National Association of Testing Authorities, Australia, to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions. Alcoa has identified that the stack emission testing company that completed the testing between 6 January-23 September 2021 applied procedural deviations to certain elements of some of the stack testing methods required in the licence.			
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 environmental impact is known or suspected at this time.			
Cause (or suspected cause) of non-compliance:			
The stack emission monitoring company had used its expertise to independently apply procedural deviations to certain elements of the testing methods contained in the licence.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa has appointed an alternative independent stack emission testing company to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions as of 1 August 2021.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 29/03/2021	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 31/03/2021	

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:	G4 (b)	Date(s) of non-compliance:	March 2021
Details of non-compliance:			
<p>Condition G4(b) of Licence L6217/1983/15 requires complaints received in a given month to be published in the local newspaper in the following month. A summary of the complaints received is also sent via email to DWER.</p> <p>During an internal annual compliance check it was identified that the complaints summary for February 2021 (nil complaints received) was not published in the local paper (Harvey Waroona Reporter) in March 2021 as required. The complaints summary was sent to DWER via email, however, the summary was inadvertently not sent to the local newspaper for publishing.</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
There is no environmental impact from this event.			
Cause (or suspected cause) of non-compliance:			
Administrative error.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
To rectify this omission the February data (nil complaints received) was published in the Harvey/Waroona Reporter on 18/01/2022, along with the December 2021 complaints summary. Additional internal checks will be put in place to ensure that this administrative omission does not reoccur.			
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: 12/01/2022	

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:	A22 (a)	Date(s) of non-compliance:	Q1 sampling events: 6/01/2021, 29/01/2021, 11/02/2021, 23/02/2021, 24/02/2021, 25/02/2021, 27/02/2021, 15/03/2021 Q2 sampling events: 27/04/2021, 29/04/2021, 30/04/2021, 6/05/2021, 7/05/2021, 12/05/2021, 28/06/2021 Q3 sampling events: 14/07/2021, 15/07/2021, 19/07/2021, 15/09/2021, 23/09/2021
Details of non-compliance:			
Alcoa contracts an independent stack emission testing company, who are accredited by the National Association of Testing Authorities, Australia, to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions.			
Alcoa has identified that the stack emission testing company that completed the testing between 6 January-23 September 2021 applied procedural deviations to certain elements of some of the stack testing methods required in the licence.			
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 environmental impact is known or suspected at this time.			
Cause (or suspected cause) of non-compliance:			
The stack emission monitoring company had used its expertise to independently apply procedural deviations to certain elements of the testing methods contained in the licence.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa has appointed an alternative independent stack emission testing company to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions as of 1 August 2021.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 29/03/2021	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 31/03/2021	

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:	A23 (a)	Date(s) of non-compliance:	Q1 sampling events: 6/01/2021, 29/01/2021, 11/02/2021, 23/02/2021, 24/02/2021, 25/02/2021, 27/02/2021, 15/03/2021 Q2 sampling events: 27/04/2021, 29/04/2021, 30/04/2021, 6/05/2021, 7/05/2021, 12/05/2021, 28/06/2021 Q3 sampling events: 14/07/2021, 15/07/2021, 19/07/2021, 15/09/2021, 23/09/2021
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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 environmental impact is known or suspected at this time.			
Cause (or suspected cause) of non-compliance:			
The stack emission monitoring company had used its expertise to independently apply procedural deviations to certain elements of the testing methods contained in the licence.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa has appointed an alternative independent stack emission testing company to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions as of 1 August 2021.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 29/03/2021	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 31/03/2021	

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:	A23 (b)	Date(s) of non-compliance:	Q1 sampling events: 6/01/2021, 29/01/2021, 11/02/2021, 23/02/2021, 24/02/2021, 25/02/2021, 27/02/2021, 15/03/2021 Q2 sampling events: 27/04/2021, 29/04/2021, 30/04/2021, 6/05/2021, 7/05/2021, 12/05/2021, 28/06/2021 Q3 sampling events: 14/07/2021, 15/07/2021, 19/07/2021, 15/09/2021, 23/09/2021
Details of non-compliance:			
Alcoa contracts an independent stack emission testing company, who are accredited by the National Association of Testing Authorities, Australia, to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions.			
Alcoa has identified that the stack emission testing company that completed the testing between 6 January-23 September 2021 applied procedural deviations to certain elements of some of the stack testing methods required in the licence.			
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 environmental impact is known or suspected at this time.			
Cause (or suspected cause) of non-compliance:			
The stack emission monitoring company had used its expertise to independently apply procedural deviations to certain elements of the testing methods contained in the licence.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa has appointed an alternative independent stack emission testing company to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions as of 1 August 2021.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 29/03/2021	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 31/03/2021	

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:	A23(b)	Date(s) of non-compliance:	5/11/2021
Details of non-compliance:			
<p>Alcoa has approval from DWER to use USEPA SW-846 Test Method 0011 (Method 0011) for aldehydes and ketones sampling on the Calciner 1-3 Low Volume Vent Stack (LVV Stack) as required by Table 14 of Appendix A of the licence.</p> <p>Alcoa has engaged a stack emission testing company, who are accredited by the National Association of Testing Authorities, to perform the aldehydes and ketones sampling on the LVV Stack.</p> <p>During Q4 2021, the stack emission testing company attempted to use Method 0011 for aldehydes and ketones sampling on the LVV Stack during normal operating conditions. At the time of sampling, the LVV Stack had a stack gas velocity of <3m/s and differential pressure of <5Pa at the sampling location. Due to the stack gas velocity and differential pressure being below the minimum requirements, it was not possible to undertake isokinetic sampling in accordance with Method 0011.</p> <p>To obtain a representative sample, the stack emission testing company undertook anisokinetic sampling for aldehydes and ketones at the LVV Stack, and otherwise followed Method 0011. The stack emission testing company considered that anisokinetic sampling was an appropriate deviation from Method 0011 to collect representative samples given the low velocity at the sampling point for the LVV Stack.</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
No environmental impact is known or suspected at this time.			
Cause (or suspected cause) of non-compliance:			
The LVV Stack was under normal operating conditions but had a stack gas velocity and differential pressure, which were below the minimum requirements for Method 0011. This made isokinetic sampling under Method 0011 not possible on this occasion. An additional compliant sample was not taken during Q4 2021.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa will implement steps for the stack emission testing company to notify Alcoa when the operating conditions are not ideal for sampling the LVV Stack using Method 0011 so the sampling can be rescheduled.			
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: 22/03/2022	

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:	A25 (a)	Date(s) of non-compliance:	Q1 sampling events: 6/01/2021, 29/01/2021, 11/02/2021, 23/02/2021, 24/02/2021, 25/02/2021, 27/02/2021, 15/03/2021 Q2 sampling events: 27/04/2021, 29/04/2021, 30/04/2021, 6/05/2021, 7/05/2021, 12/05/2021, 28/06/2021 Q3 sampling events: 14/07/2021, 15/07/2021, 19/07/2021, 15/09/2021, 23/09/2021
Details of non-compliance:			
Alcoa contracts an independent stack emission testing company, who are accredited by the National Association of Testing Authorities, Australia, to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions.			
Alcoa has identified that the stack emission testing company that completed the testing between 6 January-23 September 2021 applied procedural deviations to certain elements of some of the stack testing methods required in the licence.			
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 environmental impact is known or suspected at this time.			
Cause (or suspected cause) of non-compliance:			
The stack emission monitoring company had used its expertise to independently apply procedural deviations to certain elements of the testing methods contained in the licence.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa has appointed an alternative independent stack emission testing company to undertake stack emission monitoring for Alcoa's compliance with the relevant licence conditions as of 1 August 2021.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 29/03/2021	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 31/03/2021	

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:		Position:	
Date:	22/03/2022	Date:	22/03/2022
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.

Appendix 1

Annual Audit Compliance Report - L6217/1983/15 Supporting Documentation

Data for "Licence year" 1 January 2021 to 31 December 2021

Section C – Statement of actual production - supporting documentation

Category 46 - Bauxite Refinery - 2021 Production

L6217/1983/15 Condition G2 AACR form Section C supporting information

Month	Total calcined tonnes	Daily average tonnes	Total calcined tonnes	tonne	2,748,447
Jan-21	240,933	7,772	Daily average	tonne	7,523
Feb-21	186,170	6,649			
Mar-21	244,798	7,897			
Apr-21	217,231	7,241			
May-21	236,461	7,628			
Jun-21	233,156	7,772			
Jul-21	240,641	7,763			
Aug-21	238,256	7,686			
Sep-21	228,871	7,629			
Oct-21	239,666	7,731			
Nov-21	221,422	7,381			
Dec-21	220,842	7,124			
Total	2,748,447	7,523			

Category 52 - Power Generation and Category 67 - Fuel Burning 2021 Production

Licence L6217/1983/15 Condition G2 AACR form Section C supporting information

aggregate power generation	MWhr	672,542	aggregate powerhouse gas	GJ	18,017,468	
average power generation	MW	77	average powerhouse gas	kg/hr	40,850	
Month	Month total (MW)	Daily average (MW)	Month	Average gas (GJ)	Month	MJ/kg
Jan-21	2,470	80	Jan-21	1,590,754	Jan-21	50.3
Feb-21	2,069	74	Feb-21	1,315,580	Feb-21	50.4
Mar-21	2,401	77	Mar-21	1,564,233	Mar-21	50.3
Apr-21	1,670	56	Apr-21	1,261,305	Apr-21	50.3
May-21	2,451	79	May-21	1,602,587	May-21	50.3
Jun-21	2,335	78	Jun-21	1,512,542	Jun-21	50.4
Jul-21	2,539	82	Jul-21	1,638,577	Jul-21	50.5
Aug-21	2,550	82	Aug-21	1,583,172	Aug-21	50.5
Sep-21	2,386	80	Sep-21	1,467,869	Sep-21	50.5
Oct-21	2,369	76	Oct-21	1,536,557	Oct-21	50.4
Nov-21	2,399	80	Nov-21	1,496,480	Nov-21	50.3
Dec-21	2,383	77	Dec-21	1,447,811	Dec-21	50.0
Total	28,023	77	Total	18,017,468	Average	50.4

Category 64 - Class II Landfill - 2021 Total

Licence L6217/1983/15 Condition G2 AACR Section C supporting information

Date	S1(a)(i) class II landfill wastes (Tonnes)
Q1 2021	167
Q2 2021	275
Q3 2021	98
Q4 2021	100
Total	640

Section D – Statement of actual Part 2 waste discharge quantity - supporting documentation

Part 2 Waste Discharge - 2021 Total								
Licence L6217/1983/15 Condition G2 AACR Section D supporting information								
	BAUXITE	ALUMINA RECOVERY		RESIDUE				
	Used Dry Tonnes	Total Tonnes	Baux ----- Al ₂ O ₃	Mud / Bauxite t/t	Sand / Bauxite t/t	Sand to Residue (tonnes)	Mud to Residue (tonnes)	Total Dry Tonnes to Residue
JAN	849,134	245,385	3.46	0.35	0.22	188,963	301,434	490,397
FEB	669,617	192,637	3.48	0.36	0.23	152,167	239,219	391,386
MAR	887,477	245,863	3.61	0.36	0.23	199,695	317,127	516,821
APR	759,153	217,607	3.49	0.36	0.23	173,016	269,751	442,767
MAY	840,697	244,990	3.43	0.33	0.22	188,312	280,348	468,660
JUN	794,267	233,108	3.41	0.34	0.24	189,830	270,845	460,675
JUL	830,308	248,401	3.34	0.35	0.20	166,251	287,406	453,656
AUG	806,903	235,295	3.43	0.34	0.23	182,092	270,769	452,861
SEP	812,730	235,176	3.46	0.36	0.20	163,869	296,168	460,037
OCT	800,778	233,602	3.43	0.34	0.22	173,826	271,442	445,268
NOV	775,468	228,003	3.40	0.35	0.22	171,341	270,828	442,169
DEC	773,685	227,319	3.40	0.33	0.23	179,445	257,781	437,226
TOTAL	9,600,216	2,787,387	3.44	0.35	0.22	2,130,796	3,333,917	5,464,714