



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:	L5271/1983/14	Licence file number:	DEC643/3
Licence holder name:	Alcoa of Australia Limited		
Trading as:	Not applicable		
ACN:	004 879 298		
Registered business address:	Premises: Pinjarra Alumina Refinery, South West Hwy Pinjarra WA 6208 Registered business address: Corner Davy and Marmion Streets, Booragoon WA 6154		
Reporting period:	01 / 01 / 2024 to 31 / 12 / 2024		

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 refining	██████ metric tonnes of alumina production
Category 52: Electric power generation	2,271,226 MWhr total of power generated from Pinjarra Powerhouse and Alinta Cogeneration
Category 64: Class II and III putrescible landfill site	1,015 tonnes to Class II landfill
Category 67: Fuel burning	58,748 kg/hr monthly average fuel burning from Pinjarra Powerhouse and Alinta Cogeneration

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 refining	9,902,115 metric 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:	A8	Date(s) of non-compliance:	13/02/2024 (Cal 7), 16/02/2024 (Cal 5,6), 17/02/2024 (Cal 1,2), 21/02/2024 (Ox Kiln), 10/03/2024 (Cal 3,4) 11/05/2024 (Ox Kiln)
Details of non-compliance:			
<p>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.</p> <p>Alcoa has identified that the stack emission testing company that completed the testing on Calciners 1 to 7 and the Oxalate Kiln on the dates above applied a procedural deviation to one element of the stack testing method USEPA Method 2. USEPA Method 2 is utilised to calculate flows for USEPA Method 17 particulates testing, which Alcoa is required to follow under licence condition A8. The deviation is summarised below:</p> <p>USEPA Method 2, para 6.5 ‘Barometer’: USEPA Method 2 - The barometric pressure reading was not corrected for elevation difference. The elevation at the pressure reading location was 84m metres above sea level. The difference in the unadjusted and adjusted readings was approximately 9.8hPa, this would reduce the calculated flow rates by ~1% meaning that the results could have been over reported by the same amount. This difference in readings did not have an impact on Alcoa’s reporting associated with condition A8 under L5271/1983/14.</p>			
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. The error related to USEPA Method 2 and the suspected impact of the error was negligible on the particulates monitoring results for USEPA Method 17. The results of the testing program are not materially affected by the error.			
Cause (or suspected cause) of non-compliance:			
The stack emission testing company did not correct a calculation element as specified in USEPA Method 2 (fundamental for USEPA Method 17).			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The stack emission testing company has amended their procedures to ensure that this parameter is corrected in the future. Alcoa will conduct regular internal audits of contractors to ensure that any deviations to methods are discovered and corrected in a timely manner.			
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: 31/01/2025	

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:	W1	Date(s) of non-compliance:	29/10/2024
Details of non-compliance:			
<p>On 29/10/2024, during tailings embankment buttressing works, an excavator damaged a portion of the RSA9 HDPE Liner within the perimeter drain. Further discovery works have identified additional historical interactions with the RSA9 HDPE liner in the limited areas where the HDPE liner was close to the surface. The clay liner remains undamaged beneath the damaged portions of the HDPE Liner. All locations where HDPE was close to the surface have been inspected for historical damage and the limited portion of damaged HDPE has been repaired.</p>			
<p>What was the actual (or suspected) environmental impact of the non-compliance?</p> <p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
<p>No environmental harm as a result of the damaged HDPE liner is suspected due to the clay liner remaining intact. The clay liner is expected to have been sufficiently impermeable.</p>			
Cause (or suspected cause) of non-compliance:			
<p>An incorrect version of the RSA9 drawing file was utilised for the excavation machine dig program. As a result, the liner was understood to be located at a lower depth to where it was encountered during operations.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>The drain was diverted prior to the liner interaction and remained diverted during the discovery works and repairs, which prevented material from the drain from accessing the point of recent damage to the liner.</p> <p>Other areas of the HDPE liner where there was potential for damage were inspected. All areas where prior damage was discovered were repaired.</p> <p>Additional controls to prevent further damage to the liner from mechanical construction works on RSA9 have been implemented, including a pot holing process to positively confirm the liner’s location prior to commencement of works. The machine file for RSA9 was updated to the correct version. The machine files for all RSA’s with geosynthetic and clay liners have been reviewed to confirm they are aligned.</p>			
Was this non-compliance previously reported to DWER?			
No			
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:	W2	Date(s) of non-compliance:	29/10/2024
Details of non-compliance:			
On 29/10/2024, during tailings embankment buttressing works, an excavator damaged a portion of the RSA9 HDPE Liner within the perimeter drain. Further discovery works have identified additional historical interactions with the RSA9 HDPE liner in the limited areas where the HDPE liner was close to the surface. The clay liner remains undamaged beneath the damaged portions of the HDPE Liner. All locations where HDPE was close to the surface have been inspected for historical damage and the limited portion of damaged HDPE has been repaired.			
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 harm as a result of the damaged HDPE liner is suspected due to the clay liner remaining intact. The clay liner is expected to have been sufficiently impermeable.			
Cause (or suspected cause) of non-compliance:			
An incorrect version of the RSA9 drawing file was utilised for the excavation machine dig program. As a result, the liner was understood to be located at a lower depth to where it was encountered during operations.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The drain was diverted prior to the liner interaction, and remained diverted during the discovery works and repairs, which prevented material from the drain from accessing the point of recent damage to the liner. Other areas of the HDPE liner where there was potential for damage were inspected. All areas where prior damage was discovered were repaired. Additional controls to prevent further damage to the liner from mechanical construction works on RSA9 have been implemented, including a pot holing process to positively confirm the liner's location prior to commencement of works. The machine file for RSA9 was updated to the correct version. The machine files for all RSA's with geosynthetic and clay liners have been reviewed to confirm they are aligned.			
Was this non-compliance previously reported to DWER?			
No			
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:	S2(c)	Date(s) of non-compliance:	4/04/2024
Details of non-compliance:			
On 4/04/2024 a small amount of residual dried Oxalate product was identified within the concrete Oxalate unloading bund at Oxalate Pond #2. The oxalate was present as a thin covering of the approximately 60m ² unloading bund.			
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 known or suspected environmental impact resulting from the non-compliance.			
Cause (or suspected cause) of non-compliance:			
Established site procedure for Oxalate disposal and housekeeping of the bund not adhered to.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Oxalate within the bund was wet immediately upon identification and then washed into Oxalate Pond #2. Since the incident, Alcoa has installed signage detailing correct oxalate disposal requirements, and has reinforced procedures with the appropriate site personnel.			
Was this non-compliance previously reported to DWER?			
No			
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:	R1	Date(s) of non-compliance:	23/08/2024 12/09/2024
Details of non-compliance:			
<p>On 23/08/2024 during the daily housekeeping inspection, approximately 2L of process water was found to have been released to unsealed ground immediately adjacent the Residue Filtration Facility as a result of the failure of a concrete bund joint seal.</p> <p>On 12/09/2024 Filter 5 had a seal failure where approximately 30L of process mud was released to unsealed ground immediately adjacent the Residue Filtration Facility via the building louvres.</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 known or suspected environmental impact resulting from these non-compliances due to the immediate recovery of spilt material in accordance with site procedures.			
Cause (or suspected cause) of non-compliance:			
<p>On 23/08/2024 the degraded joint seal in the concrete bund was not identified during the previous integrity inspection completed in February 2024. It is anticipated that the filter seal degraded in the time between the last inspection and the event.</p> <p>On 12/09/2024 at the top of Filter 5, one filter plate bowed when filter cake became stuck between the filter seal faces on the uppermost portion of the filter plate. Material stuck between filter plates creates a gap in the seal through which material can be expressed. This caused a cavity failure of the Filter and subsequent release of process mud. Spray bars on the filter plates do not effectively cover the uppermost seal faces as the spray bars focus on the lower section of the filter plate where dropping filter cake is more likely to accumulate.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>All released material was recovered and disposed to the appropriate facility within the residue storage area and the cause(s) were rectified.</p> <p>Bund integrity inspections were repeated, and quality control audited. Auditing frequency of joint seal condition has been increased and material selection for the joint seal has been amended with the aim of improving seal longevity.</p> <p>The filter spray bar design did not adequately cover the uppermost portion of the filter plates. A new spray bay design is being trialed on Filter 5. This will prevent material from becoming stuck between seal faces removing the failure mode.</p>			
Was this non-compliance previously reported to DWER?			
No			
Reported to DWER verbally	Date: / /		
Reported to DWER in writing	Date: / /		

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 :			
Name: (printed)			
Position:			
Date:	28/03/2025	Date:	28/03/2025
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 – L5271/1983/14 Supporting Documentation

Data for 'Licence year' 1 January 2024 to 31 December 2024

Section C – Statement of actual production - supporting documentation

Category 46 - Bauxite Refinery

Month	Alumina Production (tonnes)
January	██████
February	██████
March	██████
April	██████
May	██████
June	██████
July	██████
August	██████
September	██████
October	██████
November	██████
December	██████
Total	██████

Category 52 - Electric Power Generation Category 67 - Fuel Burning

Month	Alcoa Pinjarra Powerhouse (MWhr)	Alinta Pinjarra Cogeneration (MWhr)	Alcoa Pinjarra Total (MWhr)	Fuel burning total (Nm ³ /h)	Fuel Burning Kg/hr
January	67,302	130,606	197,907	80,623	58,844
February	59,832	125,399	185,231	76,280	55,795
March	64,715	138,492	203,207	78,101	57,163
April	63,883	91,670	155,553	81,839	59,634
May	64,854	88,715	153,570	80,919	59,243
June	63,882	144,834	208,716	83,208	60,759
July	65,472	147,046	212,519	84,288	61,562
August	41,613	142,625	184,239	81,836	59,877
September	46,290	116,132	162,423	81,608	59,534
October	58,067	157,290	215,357	81,551	59,408
November	64,268	142,159	206,427	80,815	58,728
December	59,245	126,832	186,077	74,793	54,355
Total	719,424	1,551,803	2,271,226	Monthly average: 80,496	Monthly average: 58,748

Category 64 - Class II Landfill

Date	S1(a) class II landfill wastes (tonnes)
Q1 2024	131
Q2 2024	200
Q3 2024	270
Q4 2024	415
Total	1,015

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

Part 2 Waste Discharge

	BAUXITE	RESIDUE		
	Used dry tonnes	Mud to Residue	Sand to Residue	Total Dry Tonnes to Residue (Mud + Sand)
JAN	1,311,088	525,829	299,485	825,314
FEB	1,133,728	518,826	209,974	728,800
MAR	1,300,549	609,894	237,005	846,899
APR	1,231,117	558,902	228,303	787,205
MAY	1,285,470	571,197	248,095	819,292
JUN	1,326,638	577,274	263,413	840,688
JUL	1,392,909	583,545	293,157	876,702
AUG	1,382,969	557,471	308,296	865,768
SEP	1,340,944	561,617	274,890	836,507
OCT	1,364,025	571,976	287,024	859,000
NOV	1,361,942	548,634	302,324	850,958
DEC	1,202,689	516,721	248,261	764,982
TOTAL	15,634,066	6,701,887	3,200,228	9,902,115