



## 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](mailto: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:	Alcoa of Australia Limited		
Trading as:	Alcoa of Australia Limited		
ACN:	004 879 298		
Registered business address:	181-205 Davy Street BOORAGOON WA 6154		
Reporting period:	01 / 01 / 2023 to 31 / 12 / 2023		

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
<i>*Refer to Attachment 1 for supporting documentation for the below quantities</i>	
Category 46 – Bauxite refinery	2,551,674 tonnes of refined alumina
Category 52 – Electric Power Generation	651,313 MWhr total or average 74.35MW per day of power generated using natural gas
Category 64 – Class II or III putrescible landfill site	618 Tonnes to Class II landfill
Category 67 – Fuel burning	39,863 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	
<i>*Refer to Attachment 1 for supporting documentation for the below quantities</i>			
Category 46 - Bauxite refinery		5,315,764 tonnes of bauxite residue (tailings)	
Section E – Details of non-compliance with licence condition			
Condition no:	W3(a)	Date(s) of non-compliance:	1-5 February 2023 25 April 2023
Details of non-compliance:			
<p>Under condition W3(a) of the Licence, Alcoa is required to collect surface water samples from the licenced surface water point (SP12) monthly, when a flow is present and submit the results of the sample analysis in the annual report.</p> <p>During February and April 2023 surface water sampling was not completed in accordance with condition W3(a) for the following analytes;</p> <ul style="list-style-type: none"> <li>• pH, Electrical Conductivity and Nephelometric Turbidity Units.</li> </ul> <p>Whilst our sampling contractor did attend SP12 as scheduled to conduct the necessary sampling, no flow was detected at SP12 during their visit, except for the site visit on 28/02/2023. Unfortunately, on this date the sampler was not equipped to perform the sample at that time (maintenance run). However, this oversight has now been addressed by the sampling contractor.</p>			
<p>What was the actual (or suspected) environmental impact of the non-compliance?</p> <p><b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
There is no known environmental impact from the samples not being collected as flows were intermittent. Alcoa has identified engineering and procedural improvements that will prevent a reoccurrence of 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:			
Alcoa has identified engineering controls installation of online flow meter and procedural improvements that will prevent a reoccurrence of this event.			
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: 21/06/2023	

Section E – Details of non-compliance with licence condition			
Condition no:	A19b	Date(s) of non-compliance:	1 April – 31 December 2023
Details of non-compliance:			
<p>Condition A19(b) requires Alcoa to ensure that all sampling and analysis undertaken pursuant to conditions A22(a) A23(a), A23(b) and A25(a). During Quarters 2,3 and 4 of 2023, stack air sample analysis undertaken pursuant to conditions A23(a), A23(b) and A25(a) of the Licence could not be carried out in accordance with condition A19(b).</p> <p>In relation to Q2 sampling tests in accordance with NATA certification could not be preformed by MPL Laboratories due to testing equipment failure. As a result, these samples were split between two laboratories for the completion of testing. Both laboratories hold NATA certification however are not accredited for the accepted testing methodology.</p> <p>Alcoa confirms that during the Quarter 2,3 and 4 2023 stack monitoring program:</p> <ul style="list-style-type: none"> <li>- All samples were collected using the Approved SW-846 Test Method;</li> <li>- Alcoa’s stack sampling contractor held (and currently holds) NATA accreditation for the sample collection; and</li> <li>- Alcoa also confirms that analysis was undertaken using an HPLC 8315 method or another appropriate technique.</li> </ul> <p>Alcoa has sought recommendation from its stack sampling contractor on the most suitable option for analysis of the Aldehyde and Ketone samples at this time. The stack sampling contractor has recommended that the samples be analysed by Leeder Analytical utilising their inhouse Modified HPLC 8315 Method LA-115, whilst their NATA accreditation is pending.</p> <p>Note that as of 06/03/2024 Leeder Analytical are accredited by NATA for this method..</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
Alcoa confirms that there is no known environmental impact resulting from the non-conformance and as such no corrective actions are required to mitigate impacts.			
Cause (or suspected cause) of non-compliance:			
Contractual availability of Laboratory with NATA accreditation for specific Aldehyde and Ketone Analysis			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Note that Leeder Analytical have received NATA accreditation for HPLC 8315 Method LA-115 06/03/2024.			
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: 23/10/2023	

Section E – Details of non-compliance with licence condition			
Condition no:	A3	Date(s) of non-compliance:	02/10/2023
Details of non-compliance:			
Oxalate Kiln – Exit Gas Velocity Non-compliance with Condition A3 namely the failure to ensure that a minimum operational exhaust gas exit velocity of 12 metres per second is maintained for any exhaust stack required to be monitored under condition A25(a).			
What was the actual (or suspected) environmental impact of the non-compliance?			
<b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
Alcoa confirms that there are partial emissions to the atmosphere, which may result in minor localised odours. When the Kiln is offline, all emissions from the passive capture system follow the designed reporting process to atmosphere. Additionally, it should be noted that direct feed to the Kiln has effectively destroyed volatile organic compounds (VOCs), and the Kiln stack emissions remain within the specified license limits.			
Cause (or suspected cause) of non-compliance:			
Review of the temperature, flow rate and moisture content data measured during the Q4 2023 program at the Oxalate Kiln sampling port and then used as the inputs into a calculated velocity at the stack exit point, identified a stack exit velocity between 11.02 and 11.33 metres per second for the duration of the sampling. This condition was present for all sampling with the exception of odour which was sampled on a different day and had velocity >12m/s.			
Post sampling unstable conditions were identified and subsequently the Kiln was then taken out of service on the 4 <sup>th</sup> of October. Investigations into these unstable conditions by process engineers has identified a restriction around the forced draft fan and the likely cause in reduced velocity. The Kiln was brought back online on the 23 <sup>rd</sup> of October once rectification had been completed.			
Please be aware that, in accordance with Condition 19a, sampling must adhere to the Australian Standard AS4323.1-1995 where practicable. This standard allows a minimum of <b>three metres per second (3/ms) recorded within the sampling process</b> to ensure compliance. All tests conducted met the requirements specified by this standard, however when assessing compliance with Condition A3, these velocities are calculated as mentioned above.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Immediate controls put in place to ensure this condition does not reoccur is to calculate the stack exit velocity on the day of the sampling to ensure that the condition has been met prior to stack sampling commencing.			
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: 21/03/2023	

### Section F – Declaration

## Department of Water and Environmental Regulation

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:	Vice President Operations	Position:	V.P. Asset Management Asset Management Administration
Date:	22/03/2024	Date:	22/03/2024
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.