



## 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:	L5245/1967/14	Licence file number:	2010/007402
Licence holder name:	Alcoa of Australia Limited		
Trading as:			
ACN:	004879298		
Registered business address:	Cnr Davey St and Marmion St 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
Category 5: Processing or beneficiation of metallic or non metallic ore	1,503,439 tonnes (Residue Filtration) 0 tonnes (Red Sand plant)
Category 46: Bauxite Refining	
Category 52: Electric power generation	45.90 MW
Category 58: Bulk material loading or unloading	
Category 64: Class II or III putrescible landfill site	428.1 tonnes
Category 67: Fuel Burning	31,968 Kg/h (powerhouse gas usage)

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 5: Processing or beneficiation of metallic or non metallic ore	1,503,489 tonnes
Category 46: Bauxite Refining	2,297,530 tonnes

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:	A1	Date(s) of non-compliance:	1/1/2023; 6/1/2023; 12/1/2023; 16/1/2023; 17/1/2023; 10/2/2023; 16/2/2023; 23/2/2023; 7/3/2023; 17/3/2023;
Details of non-compliance:			
<p>Community complaints received from the Mandogalup community adjacent to the operating residue area increased (13) in Quarter 1 2023. The higher incidence of complaints related to dust and amenity is complicated by the community context with the Kwinana operations being in an industrial area where there are many offsite dust sources from other industries (quarries, landfills, and recycling), market gardens and housing developments to the north and east. During the period neighbours were encouraged to engage with Kwinana in relation to their concerns. Kwinana has a licenced dust monitoring program which records dust measured daily against a target for the Industrial Area. Results are not background corrected so reflect dust from Alcoa and third-party sources. The complaints in quarter one were not associated with any reportable target exceedances considered potentially attributable to Alcoa.</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p><b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
Alcoa do not consider that there has been any pollution or environmental harm associated with the complaints.			
Cause (or suspected cause) of non-compliance:			
During the period in which the complaints occurred Alcoa identified that there were specific shortfalls in the operations stock of suppressants and on one occasion the water cart was not available to support management of the internal roadways.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
A review of the dust suppressant materials was undertaken, and improvements made to ensure sufficient supply and stocks of material (e.g. bitumen, mulch) are kept at the facility to manage the supply challenges. The quality of mulch had changed and an alternate supply has been established to assist with mulch quality variations. An additional water cart has been deployed			

Section E – Details of non-compliance with licence condition	
<p>and high use roads have been upgraded to Bluemetal. Alternative dust suppressants were trialed; however, the application of these treatments is limited as they are affected by weather conditions. Stocks of these alternative dust suppressants are maintained to supplement the other established materials. Sprinkler availability levels were not optimum and these have been improved since.</p> <p>Complaints are responded to with the individuals concerned in line with the complaint management processes. Complaints, dust performance and improvements are communicated at the Community Consultative Network.</p>	
Was this non-compliance previously reported to DWER?	
<input type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input type="checkbox"/> 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:	W1	Date(s) of non-compliance:	31/12/2024
Details of non-compliance:			
<p>In February 2023 Alcoa identified the urgent need to activate pre-emptive preventative measures to ensure safe management of the surplus water inventory in the Kwinana Refinery's closed water circuit in accordance with the spillway conditions of the Kwinana Refinery licence L5245/1967/14 (<b>L5245</b>). This is because Alcoa identified that there was the potential for an exceedance of the maximum water capacity, which may have resulted in alkaline impacted process water flowing over the Kwinana Refinery's Cooling Pond Spillway otherwise than in accordance with the spillway conditions of L5245.</p> <p>To reduce the volume of water inputs, Alcoa determined that the abstraction rates of recovery bores in the Operational Residue Storage Areas F and H needed to be reduced. Alcoa undertook an assessment to evaluate the potential for impacted groundwater movement within the groundwater management areas that may occur as a result of temporarily reducing the abstraction of selected bores. The assessment provided confidence that the reduced abstraction would not present an unacceptable risk to down gradient properties. Alcoa engaged an independent consultant to provide an assessment of the potential groundwater movement rates.</p> <p>Abstraction rates of selected recovery bores in the Operating Residue Storage Area were reduced accordingly on 23 February 2023. Abstraction rates for the selected bores were progressively increased from 6 September 2023 On 4 October 2023 Alcoa determined that the water inventory had reduced to levels that could be safely maintained without the need for reduced recovery bore abstraction. Alcoa achieved approximately half of the annual average Operational Residue Area abstraction flow targets set out in the Alcoa Groundwater Monitoring and Management Plan, as referenced in Condition W1</p>			

Section E – Details of non-compliance with licence condition	
<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>	
<p>Groundwater impacts originating from the Operating RSA are not considered to pose an unacceptable risk to offsite receptors and properties based on the distribution of impacts and the temporary nature of the reduction in abstraction.</p> <p>This management action was taken to minimise the risk of activation of the spillway other than in accordance with the spillway conditions W13 and W14.</p>	
Cause (or suspected cause) of non-compliance:	
<p>Alcoa operates a closed water circuit at the Refinery with no constant discharge point and is dependent on several factors including refinery production, evaporation, groundwater abstraction and rainfall (above average in 2021). The surplus water balance was compounded in 2023 due to lower grade bauxite which resulted in a downturn in throughput at the Refinery. Gas supply challenges necessitated curtailment of a unit, further reducing production putting additional pressure on a higher-than-normal water inventory, prompting immediate action to manage water inventory levels to maintain the ongoing safe operations and ensure compliance with the spillway licence conditions W13 and W14.</p>	
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:	
<p>Additional groundwater monitoring was implemented to monitor the reduced abstraction for the areas affected.</p> <p>The temporary reduction in abstraction was managed to achieve approximately 50% of the annual average Operational Residue Area abstraction flow targets.</p> <p>Short term solutions being progressed include mechanical evaporation and water treatment and discharge options. A groundwater model is being developed for the operating residue area.</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: 22/02/2023; 31/3/2023; 29/11/2023

**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 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:	Interim Vice President Operations - Australia	Position:	Vice President Asset Management
Date:		Date:	26-Mar-24
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.