



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:	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 / 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 5: Processing or beneficiation of metallic or non metallic ore	471,490 tonnes (Residue Filtration) 0 tonnes (Red Sand plant)
Category 46: Bauxite Refining	██████████ (Redact – Commercially Sensitive)
Category 52: Electric power generation	33.72 MW
Category 58: Bulk material loading or unloading	██████████ (Redact – Commercially Sensitive)
Category 64: Class II or III putrescible landfill site	250.2 tonnes
Category 67: Fuel Burning	31,525 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	471,490 tonnes
Category 46: Bauxite Refining	1,540,386 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:	G2(b)(vi)	Date(s) of non-compliance:	2024 Q1 Sampling events: 02/02/2024, 03/02/2024, 09/03/2024 2024 Q2 Sampling events: 03/04/2024, 05/04/2024, 02/05/2024
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 Calciner Stacks 1-3 (located at the Refinery - Lot 102 in L5245/1967/14 Attachment 1) on the dates above applied a procedural deviation to one element of the stack testing method USEPA Method 2 which Alcoa is required to follow under licence condition G2(b)(iv). The deviation was for USEPA Method 2 where the barometric pressure reading was not corrected for elevation of the stack sampling platform.</p> <p>USEPA Method 2, para 6.5 ‘Barometer’: The Barometric pressure reading was not corrected for elevation difference. Use of the corrected Barometric Pressure readings results in a reduction to the calculated flow rates by less than 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 G2(b) under L5245/1967/14.</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> <p>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. The results of the stack emissions testing were not materially affected by the error.</p>			
Cause (or suspected cause) of non-compliance:			
The stack emission monitoring company did not correct a calculation element as specified in USEPA Method 2.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The Stack 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:	A5(a)	Date(s) of non-compliance:	2024 Q1 Sampling events: 02/02/2024, 03/02/2024, 09/03/2024 2024 Q2 Sampling events: 03/04/2024, 05/04/2024, 02/05/2024
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 Calciner Stacks 1-3 (located at the Refinery - Lot 102 in L5245/1967/14 Attachment 1) on the dates above applied an administrative procedural deviation. The deviation was for USEPA Method 2 where the barometric pressure reading was not corrected for elevation of the stack sampling platform.</p> <p>USEPA Method 2, para 6.5 ‘Barometer’: The Barometric pressure reading was not corrected for elevation difference. Use of the corrected Barometric Pressure readings results in a reduction to the calculated flow rates by less than 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 G2(b) under L5245/1967/14.</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.			
<p>No environmental impact is known or suspected at this time. The administrative error related to USEPA Method 2 and the suspected impact of the error was negligible on the particulates monitoring results.</p> <p>The results of the stack emissions testing were not materially affected by the error.</p>			
Cause (or suspected cause) of non-compliance:			
The stack emission monitoring company did not correct a calculation element as specified in USEPA Method 2.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The Stack 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:	A1	Date(s) of non-compliance:	22 May 2024
Details of non-compliance:			
<p>The design of the ship loading system means that when a new loading begins, the choke feeder skirt does not form an adequate seal until sufficient material has built up inside the choke feeder. During normal operations, the choke feeder is adequately sealed. This means that the ship loading will typically generate dust upon starting operations. Alcoa's procedures require the ship loading operator to stop loading if there is excess dust blowing from the ship hold.</p> <p>On 22 May 2024, a post on social media showing a dust event from the Alcoa Kwinana ship loading operation at the Jetty depicted in L5245/1967/14 Attachment 4 prompted an enquiry from the City of Kwinana. Investigations concluded that during the commencement of loading, a dust plume was generated, which has moved in an easterly direction towards the shore very slowly due to an inversion weather event. No dust exceedance attributed to Alcoa's operations, of licenced dust monitors occurred for the period.</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.			
There was no environmental impact suspected from the ship loading event. Alumina is not classified as harmful to the marine environment as per the International Maritime Dangerous Goods Code (IMDG).			
Cause (or suspected cause) of non-compliance:			
<p>During start-up of ship loading operation, some dust which is typical of the loader design may be visible. The ship loading operator did not identify this as excessive dust and therefore did not stop the loading operation.</p> <p>Light wind conditions caused the dust typical at start-up to move slowly, and made it appear to be a dust plume from Alcoa's alumina ship loading area.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa has changed its procedures to minimise alumina 'fines' introduced onto the delivery conveyor upon starting a new hold and has expanded its consideration of weather conditions to include inversions.			
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:	A24	Date(s) of non-compliance:	22 May 2024
Details of non-compliance:			
<p>The design of the ship loading system means that when a new loading begins, the choke feeder skirt does not form an adequate seal until sufficient material has built up inside the choke feeder. During normal operations, the choke feeder is adequately sealed. This means that the ship loading will typically generate dust upon starting operations. Alcoa's procedures require the ship loading operator to stop loading if there is excess dust blowing from the ship hold.</p> <p>On 22 May 2024, a post on social media showing a dust event from the Alcoa Kwinana ship loading operation at the Jetty depicted in L5245/1967/14 Attachment 4 prompted an enquiry from the City of Kwinana. Investigations concluded that during the commencement of loading, a dust plume was generated, which has moved in an easterly direction towards the shore very slowly due to an inversion weather event. No dust exceedance attributed to Alcoa's operations, of licenced dust monitors occurred for the period.</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.			
There was no environmental impact suspected from the ship loading event. Alumina is not classified as harmful to the marine environment as per the International Maritime Dangerous Goods Code (IMDG).			
Cause (or suspected cause) of non-compliance:			
<p>During start-up of ship loading operation, some dust which is typical of the loader design may be visible. The ship loading operator did not identify this as excessive dust and therefore did not stop the loading operation.</p> <p>Light wind conditions caused the dust typical at start-up to move slowly, and made it appear to be a dust plume from Alcoa's alumina ship loading area.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Alcoa has changed its procedures to minimise alumina 'fines' introduced onto the delivery conveyor upon starting a new hold and has expanded its consideration of weather conditions to include inversions.			
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:	A24	Date(s) of non-compliance:	12/06/2024
Details of non-compliance:			
<p>On completion of unloading caustic ship Kuljak Arrow, operations carried out the normal drain down of the caustic unloading arm which reports into a sump within Cell 3 of the Jetty depicted in L5245/1967/14 Attachment 4. On completion of the drain down operations have noticed a milky white substance mixing in the ocean from Cell 3 of the jetty. Investigations indicated that there has been a leak in the caustic loading drain down pipe that leads to the sump. Approximately 150L of raw Caustic Soda liquid (sodium hydroxide) leaked into the ocean from Cell 3 from the culvert the pipe was routed in. The current inspection and maintenance regime for the drain down pipe did not identify corrosion in the pipe, leading to the pipe failure and discharge to the ocean.</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>There was no environmental impact suspected from the caustic leak into the ocean. The sodium hydroxide is expected to be diluted by the surrounding seawater. The environmental impacts from the relatively low volume of sodium hydroxide in the marine waters is expected to be negligible.</p>			
Cause (or suspected cause) of non-compliance:			
<p>Corrosion at an elbow of the DN80 (80mm) caustic drain down pipework which is partially routed in a covered culvert led to the pipe failure and discharge to the ocean. Inspection during routine operation of the drain down pipe did not identify corrosion in the pipe.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>Replacement of the pipework and routine inspections of the caustic drain down pipe have been added to Alcoa’s maintenance system.</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: 12/06/2024	

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:			
In 2024 Alcoa did not achieve the same yield from the operating residue area bore field since reduced flows in 2023. In 2024 approximately 92.6% of the annual average Operating Residue Storage Area (RSA) abstraction flow targets set out in the Alcoa Groundwater Monitoring and Management Plan, as referenced in Condition W1 in 2024 were achieved.			
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.			
Alcoa does not consider that groundwater impacts originating from the Operating RSA (L5245/1967/14 Attachment 8) pose an unacceptable risk to offsite receptors and properties based on the distribution of impacts and the lower abstraction in 2024. Monitor bores are in place along the boundary of the Operational Residue Area and samples from the bores are routinely collected and analysed to monitor for changes in groundwater quality.			
Cause (or suspected cause) of non-compliance:			
In 2024 the bore field did not achieve abstraction rates to meet the targets specified in the Groundwater Monitoring and Management Plan due to recovery bore pump failures, scale formation within recovery bores and breakdowns of recovery bore water transfer pumps.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Additional recovery bore maintenance was implemented to improve abstraction and transfer pumping capacity was improved: <ul style="list-style-type: none"> • A recovery bore, that had previously failed, was reinstated. • Several recovery bores that were underperforming and had not improved after traditional bore maintenance methods were attempted (e.g. acid cleaning), were redeveloped. • Bore discharge lines were replaced to increase throughput. Groundwater quality in the operational RSA area continued to be monitored as per requirements of the Groundwater Monitoring and Management Plan.			
Was this non-compliance previously reported to DWER?			
<input checked="" type="checkbox"/> Yes, and			
<input checked="" type="checkbox"/> Reported to DWER verbally		Date: 16/12/2024	
<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:	W15	Date(s) of non-compliance:	17/6/2024 - 29/7/2024
Details of non-compliance:			
<p>In accordance with Condition W16 of L5945/1967/14, the Environmental Compliance Report associated with 6 land-based evaporator units installed on the RSA K (<i>L5245/1967/14 Attachment 8</i>) was submitted on 17 June 2024. Post installation it was identified on 29/7/2024 that the supplier incorrectly delivered a 6,000 L diesel storage tank, which was larger than the 4,500 L prescribed in Condition W15. The tank, which supplies diesel to the land-based evaporators, had only been used for short periods as part of commissioning. On identifying the error, the tank (and the evaporators) was tagged out to prevent operation. Whilst the diesel tank is slightly larger than that specified, it is contained within the lined residue area and the risk profile is the same as for the smaller sized tank. The supplier exchanged the tank for the 4,500 L storage tank and Alcoa provided a revised installation report on 16/8/2024.</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>			
Alcoa do not consider that there has been any pollution or environmental harm associated with the 6,000 L diesel storage tank being located within the lined residue area prior to the delivery of the correct 4,500 L diesel storage tank.			
Cause (or suspected cause) of non-compliance:			
Larger tank delivered in error based on availability.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The supplier exchanged the 6,000 L storage tank for the 4,500 L storage tank.			
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 / 07 / 2024	

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:	W20	Date(s) of non-compliance:	3 September 2024
Details of non-compliance:			
Alcoa did not carry out compliance checks in relation to the operation and potential overspray of the evaporators located in the ROWS Pond and RSA K (L5245/1967/14 Attachment 8) on the 3 September 2024, which was after the first 60 days of commencing operation.			
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 suspected. There is no evidence that overspray occurred during this period. There have been no changes to nearby vegetation or staining observed and Alcoa has received no complaints or enquiries from the public in relation to the evaporators during this period.			
Cause (or suspected cause) of non-compliance:			
Relatively new compliance task that had not yet been fully embedded into Alcoa’s system and daily operational routines.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The importance of compliance with Licence conditions, irrespective of priorities was highlighted to the operations team conducting the checks.			
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: 06/09/2024		

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:	W21	Date(s) of non-compliance:	3 September 2024
Details of non-compliance:			
Alcoa did not carry out compliance checks in relation to the operation and potential overspray of the evaporators located in the ROWS Pond and RSA K (L5245/1967/14 Attachment 8) on 3 September 2024, which after the first 60 days of commencing operation and consequently not included in the inspection log.			
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 suspected. There is no evidence that overspray occurred during this period. There have been no changes to nearby vegetation or staining observed and Alcoa has received no complaints or enquiries from the public in relation to the evaporators during this period.			
Cause (or suspected cause) of non-compliance:			
Relatively new compliance task that had not yet been fully embedded into Alcoa’s system and daily operational routines.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The importance of compliance with Licence conditions, irrespective of priorities was highlighted to the operations team conducting the checks.			
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: 06/09/2024	

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:	Vice President Operations - Australia	Position:	Australia Controller
Date:	27/03/2025	Date:	27/03/2025
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.