

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet, and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	EPR/BB3790FX
Name of operator	ALUK (GB) Limited
Location of Facility	Chepstow Aluminium Treatment Plant Newhouse Farm Industrial Estate, Chepstow, NP16 6UD
Time and date of the detection	09:54 08/09/2023

(a) Notification requirements for any activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment

To be notified Immediately	
Date and time of the event	na
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a permit condition

To be notified immediately	
Emission point reference/ source	S1 on site plan in Schedule 7 (AI monitor)
Parameter(s)	Total Aluminium
Limit	2 mg/L
Measured value and uncertainty	4.6 mg/L 24%
Date and time of monitoring	31/08/2023 13:47
Measures taken, or intended to be taken, to stop the emission	i2Analytical Laboratory analysis 23-54317-1 of AluK sample B taken at 13:47hrs on 31 st August 2023 indicated a Total Aluminium ELV exceedance of 4.6mg/L. Sample A taken at 08:47hrs on 31 st August indicated a Total Aluminium ELV of 1.1mg/L.

	The AluK in house aluminium split sample taken at 13:47hrs on 31st August 2023 indicated an AI ELV of 0.737mg/L. The AluK in house aluminium split sample taken at 08:47hrs on 31st August 2023 indicated an AI ELV of 1.03mg/L. AluK have requested a retest of i2Analytical Laboratory analysis 23-54317-1.
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Time periods for notification following detection of a breach of a limit	
Parameter	Notification period
Total Aluminium	Immediately

(c) In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment:	
To be notified immediately	
Description of where the effect on the environment was detected	na
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	A re-test of sample B 23-54317-1 indicated an AI ELV exceedance of 2.9mg/L An investigation has determined on the 29th August that the flocculation pump experienced an air lock for approximately 10 minutes. Assuming a minimum 3000 Litres per hour and based on the flocculant pump not pumping for 10 minutes we can infer that AluK processed approximately 500 litres of under processed effluent into the decantation tank. The aluminium content of the alkali tank that day and previous days ran between 2-3g/l which ranged between 1000 to 1500 times our AI ELV of 2mg/L. Dilution takes place between the rinse tanks reactor and decantation tanks. Investigations have determined that the reactor tank not having any flocculant added for 10 minutes would create a pocket of high concentration of aluminium in the effluent, enough to spike readings for a short period of time.
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	Our total discharge since the sampling time for the rest of that day was 13500 litres, if the concentration of 4.6mg/l was constant throughout this discharge then the total aluminium emitted was 62g.
Measures taken, or intended to be taken, to prevent a recurrence of the incident	Investigations into the aluminium (Al) emission limit exceedance (ELV) of 4.6mg/L that occurred at 13:47hrs on the 31st August 2023 have determined the root cause as an obstruction in the flocculant non return valve. The blockage has been identified as congealed flocculation agent GARDOFLOC Q 5960 that prevented the ball bearing located within the non-return valve from operating. Remedial actions undertaken were as follows: • The non-return valve was removed and cleaned to remove the congealed flocculant agent. • The non-return valve was refitted and tested to ensure its proper functioning. • The original flocculation agent has been replaced with fresh GARDOFLOC Q 5960. • The Al effluent discharge has subsequently been sampled and analysed to confirm that the aluminium concentration has returned to Al ELV parameter compliance. AluK also investigated how the flocculation agent GARDOFLOC Q 5960 is stored and can confirm compliance to the Safety Data Sheet storage instructions as described in Version 2 12.12.2022 Section 7 Handling and Storage sub section 7.2. Conditions for safe storage.
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	Given that the evidence that this exceedance occurred over a short period of time and that the flocculant dosing returned to normal operation within 10 minutes and subsequent testing has demonstrated ELV compliance. We can say with confidence that our weekly aluminium discharge average would have returned to below 2mg/L. The Water Treatment Technicians continue to undertake and record frequent visual inspections of the flocculant process as outlined on pages 7 and 42 of PCA Operational & Maintenance Manual - Effluent Treatment Plant.
The dates of any unauthorised emissions from the facility in the preceding 24 months.	08/11/2021, 26/11/2021, 04/01/2022, 08/02/2022, 07/04/2022, 09/09/2022, 04/11/2022 & 10/11/2022
Name*	Toby Ambler
Post	Head of Health, Safety and Environment
Signature	<i>Toby Ambler</i>
Date	29 th September 2023

* Authorised to sign on behalf of the operator