

## Annual Environmental Performance Report 2023

This Annual Environmental performance report has been prepared to meet the reporting requirements of permit condition 4.2.2. Permit condition 4.2.2 reads;

A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) each year.

The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data.

Table 1 provides the annual averages of the site effluent discharge. All the listed parameters are tested in-house, including suspended solids. Welsh Water also carry out testing on our discharge on a twice monthly basis. Their analysis determines the suspended solids from the discharge leaving site.

Since 13<sup>th</sup> December 2022, the maximum quantity of trade effluent discharge allowed from our site is 120 cubic meters per day. The consent limits are listed in Table 1 below.

Table 1

Parameter	Consent Limits mg/l	Annual Averages
<b>COD (5)</b>	8500	1016
<b>Suspended Solids</b>	1500	348
<b>Sulphate</b>	500	240
<b>Copper</b>	1.0	0.30
<b>Lead</b>	2.0	0.32
<b>Nickel</b>	1.0	0.31
<b>Zinc</b>	2.0	0.31
<b>Ammonia</b>	125	48.14
<b>pH</b>	6 to 11	7.61

Although Table 1 shows that we were within consent limits for the year 2023, there was one breach recorded by DCWW during their external testing as follows:

- Sample taken on 10/11/2023 – Nickel and Zinc levels were unsatisfactory at 4.0 and 6.4 respectively.

Investigation of all incoming loads for a month prior to the sample test could not identify any waste which could have caused the breach. However, for two days up to and including the sample test day, the plant had been in the process of de-sludging, which could have caused disturbance in the system, leading to a breach. It was agreed that going forward, a full internal test will be conducted immediately prior to any de-sludging activities.

Table 2 below provides the annual performance for water & energy consumption for the site. Site usage of energy decreased from 50.09 to 45.09 MWh, meaning that we have successfully exceeded our target to reduce overall usage by 5%.

Solar panels were commissioned at the site during March 2023.

**Table 2**

<b>Performance Parameters</b>		
Parameter	Frequency of Assessment	Consumption
Water Usage	Annually	340m <sup>3</sup>
Energy Usage	Annually	45.09 MWh

Table 3 below provides the annual discharge volumes split into quarters. The discharge is monitored by a flow meter installed on site. The Flow Meter is approved by SIRA and is regularly inspected and calibrated. The last site inspection was in May 2023.

The flow is within the discharge consent volumes as provided by DWR Cymru Welsh Water.

**Table 3**

<b>Discharge Volume</b>	
Quarter 1	2,107 m <sup>3</sup>
Quarter 2	3,032 m <sup>3</sup>
Quarter 3	1,984 m <sup>3</sup>
Quarter 4	2,077 m <sup>3</sup>
<b>Total</b>	<b>9,200 m<sup>3</sup></b>

The discharge volume has decreased from the previous year, when we discharged a total of 10,888 m<sup>3</sup>. The total raw materials used also decreased in 2023 from 13,883.84 tonnes the previous year to 12178.75 tonnes. This can be attributed to non-operation of the wash plant.

Fugitive and static emissions are monitored throughout the year. There have been no environmental incidents or complaints over the past 12 months.

We recognise the environmental impact of our business and are dedicated to protecting our local and global environment through responsible management.