

Bakelite Annual Environmental Review 2024

Introduction: Permit condition 4.2.1 requires an annual report covering the previous year to include:

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the assessment of the impact of the emissions submitted with the application;
- (b) where the operator's management system encompasses annual improvement targets, a summary report of the previous year's progress against such targets;
- (c) the annual production /treatment data set out in schedule 5 table S5.2;
- (d) the performance parameters set out in schedule 5 table S5.3 using the forms specified in table S5.4 of that schedule; and
- (e) details of any contamination or decontamination of the site which has occurred.

Overview:

Overall, this has been a reasonable year, with a single permit exceedance. There has been an issue with staff absence which has been resolved with improved training and allocation of extra resources.

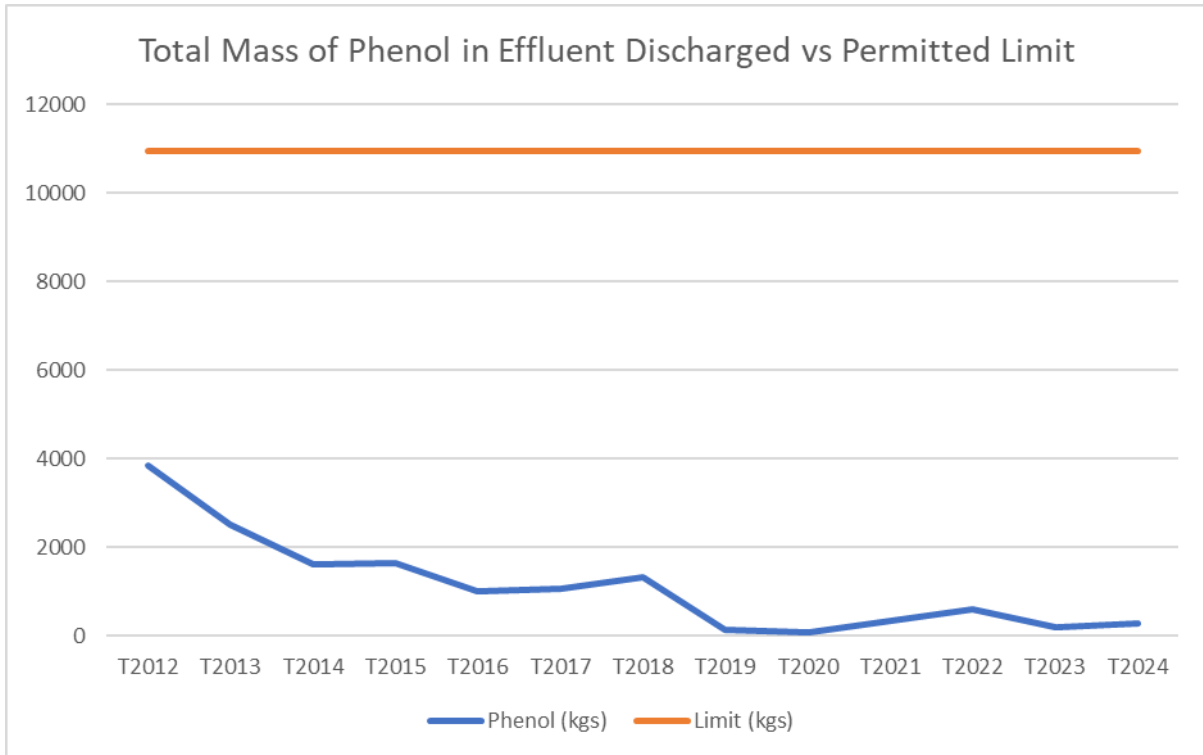
The effluent plant discharge flow was approx. 20% higher than the prior year. This contributed to higher electricity usage but was, in part, offset by higher production figures.

Production was increased from the previous year by 12% and the overall energy per tonne metric decreased by 4.9%. This is a welcome improvement on the prior year.

The site continued with its accreditation to the ISO14001:2015 and ISO45001: 2018 standards

(a) Monitoring and Assessment:

As per the previous year, plant performance was closely monitored and although the total phenol emitted increased, it is still low compared to most past results and very low compared to the permitted amount.



Gas consumption increased but not at the same rate as the increase in production (12.1% vs 5.7%). Electricity use also increased. Overall, this has resulted in an lower energy per tonne of production ratio. This indicates better efficiency but there can also be an effect from recipe mix, which is currently not documented.

Water use through the year was reduced by 15%

Quarterly air monitoring on the scrubber and annual monitoring on the boilers gave results within the permitted limits.

(b) Targets:

Target setting followed a similar process to last year. It was seen that good progress had been made on environmental indicators so the metrics were more H&S focussed.

Systems	Leading Indicator	Mth	YTD	Lagging Indicator	This month	YTD Status
ROCs / Incidents / Events	Average 30 day closure (days)			Recordable and reportable events (T=0)	Green	Red
Job Safety Observations	Targets -(Depts - 2/mth, EHS, 4/mth - T=10/mth) from April	Mth	YTD			
Overdue RAs	No of overdue RAs (44 in Jan, target is 0 at yr end (4/mth))	Mth	YTD			
Closing of Actions (ATS + Int Audits)	No of open overdue actions (T=0)	Mth		Number of incidents and events (T=2/mth)	Green	Red
		Mth	YTD			
Safety Meetings	Safety meetings held to plan T=10 per 3mths over all depts	Mth	YTD			
Dec-24						

Outside of the main metrics, the quotation for the flood resilience work was updated but work did not progress in 2024 due to work pressures. This is planned for 2025.

Work on understanding the impact of the UK Industrial Emissions Directive and Waste Gas Bref will continue into 2025, as the publication dates gets closer to being finalised.

There were 5 x external audits of EHS management systems and 12 internal audits were carried out, with some rescheduled for next year, including the audit of the air emissions monitoring and waste management. These were both audited in the previous year and the processes have not changed. They will be audited in the first half of 2025.

The amount of energy used per tonne of production decreased by approx. 4.9%

The amount of water used per tonne of production decreased by approx. 15.3%

(c) and **(d)** are covered by submission of the annual returns to NRW

(e) Contamination / De-contamination:

Information about significant waste streams:

Description	Amount (tonnes)	Comments
Bio-sludge	378	
Hazardous Waste	198	This is representative of general process wastes such as filter waste, contaminated PPE, lab waste, contaminated packaging and fluctuates year on year.