

PB Gelatins Annual Environmental Performance Report 2023

Permit No: EPR/DP3030ZC

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This report is submitted in accordance with the requirements of permit condition 4.2.2

1. REVIEW OF EMISSIONS

No point source emissions to air or land have been recorded except from the sources and emission points listed in schedule 3 tables. The limits given in schedule 3 have not been exceeded during 2022.

2 Gas fuelled space heaters to raise the ambient air temp in the New Farm building. The exhaust vents from these heaters have been included in the Permit Variation.

2. REVIEW OF MONITORING

2.1 Monitoring - Site Effluent

Table S3.3 Process Monitoring Requirements – Site Effluent

	Parameter	Monitoring frequency	Monitoring method
DP1	pH	Continuous Monthly*	Sample analysis by Welsh Water
DP1	Suspended Solids	Monthly *	Sample analysis by Welsh Water
DP1	COD	Monthly *	Sample analysis by Welsh Water
DP1	Discharge Flow	Continuous *	Sample analysis by Welsh Water

Site Effluent - Monitoring Results

Welsh Water analysed 12 effluent samples during 2023. There were 3 occasions where the samples were out of the consent compliance limits. All of the issues were investigated and appropriate actions introduced.

**sampling now takes place on a monthly basis, a frequency that is determined by Welsh Water*

2.2 Monitoring - Odour

Table S3.3 Process Monitoring Requirements – Odour

Emission point ref	Parameter	Monitoring Frequency	Monitoring method
Site perimeter	Odour	Daily	Sniff testing

2.3 Monitoring - Groundwater

Periodic monitoring of groundwater will be carried out every 5 years. Next report to be submitted January 2026

2.4 Monitoring - Soil

Periodic monitoring of soil will be carried out every 10 years. Report submitted September 2022. Next report to be submitted September 2032.

3. COMPLAINTS

3.1 Dust Complaints

No dust complaints were received in 2023.

3.2 Odour Complaints

2 odour complaints were received in 2023.

3. REVIEW OF ENERGY EFFICIENCY

A review to identify suitable opportunities to improve the energy efficiency of the activities at PB Gelatines is taking place yearly.

There was a 1.7% increase in the amount of electrical consumption in 2023 compared to 2022, and there has been a 4.6% decrease in electricity consumed per tonne of gelatine produced.

There was a 5.9% increase in the amount of gas consumed in 2023 compared to 2022, which has resulted in a 0.6% decrease in gas consumed per tonne of gelatine produced. The total energy usage in 2023 compared to 2022 is 4.3% increase, which has resulted in a 2.1% decrease in energy consumed per tonne of gelatine produced.

4. REVIEW OF RAW MATERIAL AND WATER

A review to identify whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water will take place on a yearly basis.

Net production of Gelatine increased by 6.6% from previous year with a 7.9% increase of raw material used in 2023 compared to 2022 but there has been 1.2% increase per tonne of gelatine.

There was a 9.7% decrease in the amount of Ossein sludge waste in 2023 compared to 2022, which has resulted in a 15.2% decrease of Ossein sludge waste per tonne of gelatine.

There was a 38.1% increase in the amount of solid bone waste in 2023 compared to 2022, and there has been a 29.6% increase of solid bone waste per tonne of gelatine produced.

The increases in the generation of the solid bone waste, is associated with lower extractability of gelatin, due to changes in the temperature profile of the extraction process to achieve higher quality gelatin.

Mains water (domestic use – nonproduction) use has increased by 14.9% from last year.

There was a 0.9% decrease in the abstracted water used in 2023 compared to 2022, which has resulted in a 7.0% decrease in water abstracted per tonne of gelatine.

There was a 0.7% decrease in the total water used in 2023 compared to 2022, which has resulted in a 6.8% decrease in the total water used per tonne of gelatine.

5. ASSESSMENT OF PERFORMANCE PARAMETERS AS SET OUT IN SCHEDULE 4 TABLE S4.2

5.1 Form Sewer 1

Parameter	Quantity	Units
Effluent solids	304	Tonnes
Effluent liquid discharged	730,551	M ³

7.2 Form Performance 1

Parameter	Quantity	Units
Total raw material used (Ossein only)	35,833	Tonnes
Gelatin produced	6,220	Tonnes
Ossein sludge waste	10,690	Tonnes
Solid bone waste	928	Tonnes

7.3 Form Water Usage 1

Parameter	Quantity	Units
Mains water	10,256	M ³
Abstracted water	799,695	M ³
Total water usage	809,951	M ³

7.4 Form Energy Usage 1

Parameter	Quantity	Units
Electricity consumption	8,971	MWh
Gas consumption	75,581	MWh
Diesel consumption	515	MWh
Total energy usage	85,067	MWh

6. PERMIT COMPLIANCE ASSESSMENT REPORTS

3 Compliance Assessment Reports were received from NRW in 2023

7. ADDITIONAL ENVIRONMENTAL IMPROVEMENTS

- Work has started to install the A21 Effluent treatment system, to reduce any potential pollution incidents of the River Taff and ground water.
- The drier heat recovery system has been refurbished to recover energy from the cooling water return and prevent flash steam being generated on the drier condensate tank.
- Improvement work has been carried out on the bulk chemical installation to prevent pollution.