

PB Gelatins Annual Environmental Performance Report 2021

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 2021.

2 gas fuelled space heaters to raise the ambient air temp in the New Farm building. The exhaust vents from these heaters will require a Permit Variation in 2022

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 2021. All samples were within consent compliance limits.

**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. A Site Condition Report was submitted in January 2021

2.4 Monitoring - Soil

Periodic monitoring of soil will be carried out every 10 years. Monitoring is scheduled to take place in 2023.

3. COMPLAINTS

3.1 Dust Complaints

No dust complaints were received in 2021.

3.2 Odour Complaints

6 Odour complaints were received in 2021, 4 from NRW complaints line, 2 complaints were received directly from neighbouring businesses.

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 11.1% increase in the amount of electrical consumption in 2021 compared to 2020, and there has been a 15.4% increase in electricity consumed per tonne of gelatine produced related to quality improvement.

There was a 4.3% decrease in the amount of gas consumed in 2021 compared to 2020, which has resulted in a 0.7% decrease in gas consumed per tonne of gelatine produced because we had a trailer diesel steam boiler on site representing 2415 MWh diesel usage. The total energy usage in 2021 compared to 2020 is exactly the same amount, but there has been a 3.8% increase of total energy usage per tonne of gelatine produced due to a lower production volume in 2021.

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 decreased by 3.7% from previous year with a 3.3% decrease of raw material used in 2021 compared to 2020 but there has been 0.3% increase per tonne of gelatine.

There was a 3% increase in the amount of Ossein sludge waste in 2021 compared to 2020, which has resulted in a 6.9% increase of Ossein sludge waste per tonne of gelatine produced due a better control in the DAF pH resulting in a higher sludge generation.

There was a 15.5% decrease in the amount of solid bone waste in 2021 compared to 2020, and there has been a 12.3% decrease of solid bone waste per tonne of gelatine produced. Mains water (domestic use – non production) use has decreased by 0.1% from last year.

There was a 3.1% increase in the abstracted water used in 2021 compared to 2020, which has resulted in a 7% increase in water abstracted per tonne of gelatine.

There was a 3.0% increase in the total water used in 2021 compared to 2020, which has resulted in a 7% increase in the total water used per tonne of gelatine linked due a lower yield compared with 2020.

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

5.1 Form Sewer 1

Parameter	Quantity	Units
Effluent sludge	0	Tonnes
Effluent solids	0	Tonnes
Effluent liquid discharged	749,342	M3

7.2 Form Performance 1

Parameter	Quantity	Units
Total raw material used (Ossein only)	33,253	Tonnes
Gelatin produced	5,907	Tonnes
Ossein sludge waste	16,588	Tonnes
Solid bone waste	716	Tonnes

7.3 Form Water Usage 1

Parameter	Quantity	Units
Mains water	9,403	M3
Abstracted water	822,047	M3
Total water usage	831,450	M3

7.4 Form Energy Usage 1

Parameter	Quantity	Units
Electricity consumption	9,092	MWh
Gas consumption	73,145	MWh
Total energy usage	84,652	MWh

6. PERMIT COMPLIANCE ASSESSMENT REPORTS

Six Compliance Assessment Reports were received from NRW in 2021

7. ADDITIONAL ENVIRONMENTAL IMPROVEMENTS

- Replacing screw blowers to more efficient versions
- Replacing air compressors to more efficient versions
- Replacing inefficient light fittings over to LED
- Introducing a work from home policy, to reduce travel to and from work