



**APPLICATION FOR AN ENVIRONMENTAL  
PERMIT VARIATION UNDER THE  
ENVIRONMENTAL PERMITTING  
(ENGLAND AND WALES) REGULATIONS  
2016 (AS AMENDED)**

**NON-TECHNICAL SUMMARY**



**PB LEINER**

The Clear Solution

**P B GELATINS U.K. LIMITED  
UNIT A6, SEVERN ROAD,  
TREForest INDUSTRIAL ESTATE,  
PONTYPRIDD, CF37 5SQ**

**ECL Ref: PBGE.01.09/NTS**

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## ACRONYMS/TERMS USED IN THE TEXT

<b>BAT</b>	<b>Best Available Techniques</b>
<b>BRef</b>	<b>Best Available Techniques Reference Document</b>
<b>CCA</b>	<b>Climate Change Agreement</b>
<b>CO<sub>2</sub></b>	<b>Carbon Dioxide</b>
<b>DAA</b>	<b>Directly Associated Activities</b>
<b>DAF</b>	<b>Dissolved Air Flotation</b>
<b>DCWW</b>	<b>Dwr Cymru Welsh Water</b>
<b>ECL</b>	<b>Environmental Compliance Limited</b>
<b>EMS</b>	<b>Environmental Management System</b>
<b>EP Regulations</b>	<b>Environmental Permitting (England and Wales) Regulations 2016 as amended</b>
<b>EPRP</b>	<b>Emergency Preparedness and Response Plan</b>
<b>EQS</b>	<b>Environmental Quality Standards</b>
<b>ERA</b>	<b>Environmental Risk Assessment</b>
<b>IBC</b>	<b>Intermediate Bulk Container</b>
<b>IED</b>	<b>Industrial Emissions Directive</b>
<b>NRW</b>	<b>Natural Resources Wales</b>
<b>OMP</b>	<b>Odour Management Plan</b>
<b>OTNOC</b>	<b>Other Than Normal Operating Conditions</b>
<b>PB Gelatins</b>	<b>P B Gelatins U.K. Limited</b>
<b>PPMR</b>	<b>Planned Preventative Maintenance Regime</b>
<b>QMS</b>	<b>Quality Management System</b>
<b>SCR</b>	<b>Site Condition Report</b>
<b>The Installation</b>	<b>PB Gelatins Treforest Gelatin Manufacturing Site</b>

## 1. INTRODUCTION

- 1.1. Environmental Compliance Limited (“ECL”) have been commissioned by P B Gelatins UK Limited (“PB Gelatins”) to prepare an Environmental Permit variation application in relation to Environmental Permit EPR/DP3030ZC at their gelatin manufacturing site, hereafter referred to as “the Installation”, located at Unit A6, Severn Road, Treforest Industrial Estate, Pontypridd, CF37 5SQ.
- 1.2. The Permit variation application proposes the following:
- new effluent treatment plant associated with building A21 operations, altered site drainage and one additional point source emission to sewer designated DP2;
  - expansion of the Environmental Permit boundary for the inclusion of additional storage areas within Buildings A12 and A13;
  - installation of two new biofilters – one to service the ‘A18 New and Millennium Farm’ Buildings and a second unit for the A18 ‘Old Farm’ building;
  - incorporation of ten additional point source emissions to air designated EP20-EP29;
  - installation of a new bunded 15m<sup>3</sup> hydrogen peroxide tank and a 30m<sup>3</sup> salt saturator (brine) vessel adjacent to the A21 building.
- 1.3. A Site Layout Plan (PBGE.01.09-01) and Drainage Arrangements Plan (PBGE.01.09-02) have been prepared as part of this variation application to illustrate the proposed expanded Environmental Permit boundary and emission points. The Permit drawings have been submitted as part of this application.
- 1.4. Pre-application advice has been obtained from Dale Padfield (Site Inspector and Senior Officer – Industry Regulation Team) and Geraint Harris (Senior Officer – Industry Regulation Team) of Natural Resources Wales (“NRW”). The proposals discussed related to the new effluent treatment and drainage arrangements. The appropriate Best Available Technique Conclusions and regulatory guidance documents were confirmed by NRW as part of these discussions.

## 2. LISTED ACTIVITIES

- 2.1.1. The Installation is currently permitted as Schedule 1 Activities under the Environmental Permitting (England and Wales) Regulations 2016 as amended (“EP Regulations”) as detailed in Table 1 below.

**Table 1: Permitted Schedule 1 Activities**

Schedule 1 Activity	Description of Specified Activity	Limits of Specified Activity
Section 6.8 Part A1 (c)	Disposing of or recycling animal carcasses or animal waste, at a plant with a treatment capacity exceeding 10 tonnes per day of animal carcasses or animal waste or both in aggregate.	From receipt of ossein and other raw materials to the extraction and storage of gelatin.
Section 5.4 Part A1 (a) (ii)	Disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by physico-chemical treatment.	From collection of process effluent to discharge to sewer, including the Dissolved Air Flotation (“DAF”) plant.

- 2.1.2. The Directly Associated Activities (“DAA”) currently permitted are detailed in Table 2.

**Table 2: Directly Associated Activities**

DAA	Description of DAA	Limits of Specified Activity
Storage of waste	Storage and handling of by-products and wastes generated by the process	From receipt of by-products and wastes from the process to dispatch from site.
Finished product storage	Storage of finished products	From receipt of finished products to dispatch of finished products.
Raw materials storage	Raw materials storage and handling	From receipt of raw materials to transfer to the manufacturing process.
Chemical storage	Chemical storage and handling	From receipt of materials to their use on-site or disposal off-site.

- 2.1.3. There will be no change to the Schedule 1 Activities or the DAAs as a result of this variation application.
- 2.1.4. To ensure that the Environmental Permit application documents which form part of the Environmental Permit remain reflective of the site operations, the variation documents including Permit drawings have been prepared to detail the proposed changes at the Installation.

### 3. MANAGEMENT TECHNIQUES

- 3.1.** PB Gelatins operate their own in-house Environmental Management System (“EMS”) which has been developed in accordance with regulatory guidance.
- 3.2.** The Plant Manager has overall responsibility for environmental matters at the Installation.
- 3.3.** A summary of the existing EMS is provided within the application. The EMS will be updated to take account of the variation proposals, including:
- update to the EMS documents to take account of any additional Environmental Permit Conditions and new Trade Effluent Consent limits;
  - the Environmental Risk Assessment (“ERA”) (PBGE.01.09/ERA) will be used to inform the new risks and opportunities at the Installation;
  - the environmental objectives and targets will take account of the proposed changes to ensure they remain appropriate, achievable but challenging;
  - operational procedures will be reviewed to ensure they are aligned with the proposed changes detailed as part of the variation, for example, a new A21 effluent treatment operational procedure will be prepared, as well as waste handling and transfer procedures to detail how waste from the new proposed effluent treatment process will be dealt with;
  - the documented PPMR will be updated to include maintenance and inspection related to the new plant and equipment;
  - emergency plans and procedures will be updated to take account of any additional risks including the risk-based OTNOC management plan;
  - employees will be trained in the updated EMS and associated operational procedures, such as all relevant employees will be suitably trained in the new effluent treatment system by the Engineering Department. Roles will be assigned and training given with each relevant employee. Records will be held to show training has been completed and understood. Refresher training will be provided annually; and
  - all changes to the EMS will be documented and communicated to all employees.

## 4. OPERATING TECHNIQUES

### 4.1. Technical Standards

4.1.1. **European Legislation** – The following European Legislation will be used to inform the variation application:

- the Industrial Emissions Directive (“IED”) is intended to be a single legislative instrument to control pollution to air, water and land and set challenging industry standards. The established environmental principles and EU environmental law continues to have effect in UK law, therefore, the requirements of IED will therefore be considered relevant at this time; and
- the Best Available Techniques (“BAT”) Reference Document (“BRef”) for Waste Treatment (October 2018) will be considered as appropriate for the effluent treatment proposals; and
- the Slaughterhouses and Animal By-products (May 2005) BRef and the revised Final Draft of this BRef (March 2023) will be considered for future proofing of the proposals submitted as part of this variation application.

4.1.2. **National Legislation** – NRW implement the requirements of the IED via the EP Regulations and have provided guidance documents to assist in the preparation of Environmental Permit applications and the ongoing management of permitted Installations. NRW’s ‘*How to comply with your environmental permit*’ (Version 8, October 2014) has been considered as part of this variation application.

### 4.2. Proposed Activities

#### Effluent Treatment and Drainage Arrangements

4.2.1. The existing effluent treatment system is proposed to remain in place with no proposed changes to the operational stages or discharge point. However, it is proposed that the existing effluent treatment system will only serve A18 ‘Old Farm’ and ‘New Farm’ areas of the Installation.

4.2.2. The new effluent treatment system is proposed to be installed adjacent to building A21 as this new system will solely serve and treat A21 wastewater. The purpose of the new system is to remove solids from the A21 process wastewater and correct the pH prior to discharge directly to foul sewer.

4.2.3. The proposed effluent treatment will avoid the high pH variability A21 process effluent from travelling via and corroding the wider existing effluent treatment system as low pH of the effluent can lead to corrosion of the drainage pipework and pumps. Therefore, this proposal is an improvement compared to the existing effluent treatment and drainage network currently at the Installation.

4.2.4. It is proposed that the A21 effluent will be held within a bunded subsurface stainless-steel tank of 30m<sup>3</sup> capacity. The new tank will benefit from a level meter. The effluent will then be pumped by two stainless steel pumps from the collection to the screening system (two 0.5mm screening system) with the addition of cold water. The pH will be monitored prior to screening, in addition to flow.

- 4.2.5. The solids generated via the screening process will be collected within a roll on roll off stainless-steel skip under a roofed structure and the liquid phase will be pumped into a new bunded settling tank for balancing (natural pH correction).
- 4.2.6. A new bunded settling/balancing tank of approximately 400m<sup>3</sup> capacity will be installed. The bund capacity will be 447m<sup>3</sup>, therefore, providing in excess of 110% of the total contents of the tank.
- 4.2.7. The effluent will be held in the new bunded balancing tank, which has an effluent storage retention time of approximately 8 hours, and benefits from an aeration system, before being pumped using above ground centrifugal pumps through an in-line static mixer for pH correction. The pumps and static mixer will be located within a kerbed concrete area connected to the pumping station.
- 4.2.8. The effluent balance tank will benefit from an acid wet scrubber to remove any potential odours.
- 4.2.9. Effluent pH will be corrected with acid and alkaline dosing using sodium hydroxide, which will be stored in an existing bunded 10m<sup>3</sup> storage tank, and hydrogen chloride, which will be stored in a new bunded Intermediate Bulk Container ("IBC"). A pH sensor will monitor the pH during correction and a flow meter and flow control will also be installed.
- 4.2.10. Once the effluent within the static mixer is of the correct pH for discharge to foul sewer (pH 5-11) in accordance with the Trade Effluent Consent, the effluent will be discharged via the proposed new discharge point DP2. A flow meter will be installed immediately prior to the discharge point to ensure discharge quantities anticipated to be in the region of 1,500m<sup>3</sup> per day or 100m<sup>3</sup> per hour are also in accordance with the Trade Effluent Consent.
- 4.2.11. A further element of the effluent improvement proposals is the re-routing of the drainage system associated with the Liming Facility (A18). This will enable the current drainage system to be isolated and made redundant as shown as the cyan coloured drainage line on the Drainage Arrangements Plan (PBGE.01.09-02) contained in Section 3 of this application submission.
- 4.2.12. The manhole designated E14 will be reconstructed and it is proposed that 4 new manhole chambers within the old liming building will be installed. The drainage system to the western side of the building will be redirected to the new manhole changes by changing the elevation of the drainage line.
- 4.2.13. The old drainage system will be isolated and sealed.
- 4.2.14. The section of drains from A21 to the pumping station will be isolated by filling the system with foam concrete. The manhole covers will be removed and remedial work carried out to pavements and roads.

### **Additional Storage Areas**

- 4.2.15. The EP boundary is proposed to be expanded to include Buildings A12 and A13 for storage of packaging material, WIP/intermediate material, as well as finished product.
- 4.2.16. The proposed EP boundary (green outline) is shown on the Site Layout Plan (PBGE.01.09-01) contained Section 3 of this submission.

### **Gas Space Heaters**

- 4.2.17. Two gas space heaters are proposed in the A18 'New Farm' and 'Millennium Farm' buildings for ambient heating of the buildings to ensure the contents within the liming pits remain at 16°C. Consequently, two point source emissions to air are proposed designated as EP22 and EP23.

### **Biofilters**

- 4.2.18. The installation of two new biofilters; one to service the A18 'New Farm' and 'Millennium Farm' Buildings and a second unit for the A18 'Old Farm' building are proposed.
- 4.2.19. The biofilters will reduce potential fugitive odour emissions from the blowing of the liming pits which releases ammonia and hydrogen sulphide gas. The addition of two additional point source emissions to air, designated EP26 and EP27, are proposed for the two biofilters.

### **Raw Material Storage Vessels**

- 4.2.20. As part of this variation application, a new 30m<sup>3</sup> salt saturator vessel is proposed which is to be located to the rear of the A21 building as part of the abstracted water treatment process. The salt saturator produces brine which is used for the regeneration of the water softeners on the boiler feedwater and de ioniser systems. The brine is also used for the regeneration of the anion columns of the de ionisers. The new vessel eliminates the requirement for manual handling of 25kg bags of sodium chloride (salt).
- 4.2.21. A new integrally banded 15m<sup>3</sup> hydrogen peroxide tank to be located adjacent to the A18 'Old Farm' building is also proposed for use as part of the liming process to control microbiological growth in the ossein. The new system will discharge a set quantity of hydrogen peroxide into the discharge of the ossein reception intake pump to control microbiological growth within the ossein. The system improves the quality of the gelatin, as well as reduce odour as the ossein will have reduced microbiological loading.

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### **Additional Point Source Emissions to Air**

- 4.2.22. Ten additional emission points to air designated EP20-29 are proposed.
- 4.2.23. Of the ten proposed, five are new emission points associated with the two gas space heaters (EP22 and 23), the effluent treatment system balance tank wet scrubber (EP28) and the two biofilter flues (EP26 and EP27).
- 4.2.24. This Permit variation application also aims to capture five existing emission points at the Installation, including odour control system exhausts (EP20, EP24, EP25, EP29), and a hot water boiler exhaust (EP21).

## 5. EMISSIONS

### 5.1. Emissions to Air

5.1.1. PB Gelatins are proposing to add ten new point source emissions to air as follows:

- A21 extraction residue tanks exhaust – EP20;
- liming facility hot water boiler exhaust – EP21;
- A18 space heater exhausts – EP22 and EP23;
- DAF sludge tank odour control system exhaust – EP24;
- A18 balance tank odour control system exhaust – EP25;
- A18 biofilter exhausts – EP26 and EP27;
- A21 effluent treatment balance tank wet scrubber exhaust – EP28; and
- effluent pumping station sludge tank odour control system exhaust – EP29.

5.1.2. Detailed air quality modelling has been undertaken to predict the impacts associated with the proposed emissions from point source emissions from the boiler (designated EP21) and the two space heaters (designated EP22 and EP23).

5.1.3. The study has been conducted to determine the impact of oxides of nitrogen (“NO<sub>x</sub>”) and carbon monoxide (“CO”) on human health for receptors within a 2km radius of the Installation. Specified environmental receptors within both a 10km and 2km radius of the discharge stacks have also been assessed.

5.1.4. The Air Dispersion Modelling Study (PBGE.01.10/ADM) concluded that the emissions arising will not have a detrimental impact on local air quality, human health or the sensitive habitat sites assessed.

### 5.2. Emissions to Surface Water

5.2.1. There are no proposed emissions to surface water as part of this variation application.

### 5.3. Emissions to Sewer

5.3.1. PB Gelatins propose to install a second discharge point to sewer to be designated DP2 to serve the new effluent treatment system associated with Building A21 process effluent. This proposed emission point is shown on the Site Layout Plan (PBGE.01.09-01).

5.3.2. A new trade effluent consent will be obtained from Dwr Cymru / Welsh Water (“DCWW”) for this discharge point. On-going discussions with DCWW has created a chain of environmental responsibility to minimise pollution and to protect the environment as a whole.

5.3.3. It is anticipated that the trade effluent consent will include a discharge flow limit from DP2 of 1,500m<sup>3</sup> per day. A flow meter will be installed immediately prior to the discharge point to ensure quantities discharged are in accordance with the Trade Effluent Consent.

- 5.3.4. There are no relevant substances being discharged with associated environmental quality standards (“EQS”) as listed in the EA’s estuaries and coastal waters priority hazardous substances and specific pollutants and operational EQS spreadsheets, consequently an H1 assessment is not required as part of this application.

#### **5.4. Emissions to Land**

- 5.4.1. There are no proposed emissions to land as part of this variation application.

#### **5.5. Fugitive Emissions to Air**

- 5.5.1. All plant and equipment will be operated in accordance with manufacturer manuals and instructions and subject to routine maintenance and inspection to ensure they are operating within set parameters and at optimal performance levels.
- 5.5.2. The operation of the biofilters will be in accordance with the manufacturer manual and instructions. The moisture content, drainage, pH, temperature, nutrient availability and the pressure drop across the biofilter media will be monitored and controlled within reasonable limits to maintain biofilter performance.
- 5.5.3. A contract will be in place with a specialist biofilter maintenance company who will attend site regularly to ensure the biofilters are achieving optimum odour control performance.
- 5.5.4. The activated carbon will be replaced in accordance with the manufacturer recommendations and inspections and maintenance will be included in the planned preventative maintenance regime (“PPMR”).
- 5.5.5. The operation of the boiler and space heaters will also be in accordance with the manufacturer manual and instructions. Servicing of the boiler and heaters and maintenance of the extraction systems and discharge points will be undertaken as part of the PPMR which includes all plant and processing equipment. This will ensure optimal performance and to instigate any boiler tuning if deemed necessary.
- 5.5.6. The operation of the odour control systems will be in accordance with the manufacturer manual and instructions and servicing and maintenance of the extraction systems and discharge points is undertaken as part of the PPMR which includes all plant and processing equipment. The odour control units are checked on a monthly basis and a specialist odour control monitoring specialist undertakes bi-annual inspections.

#### **5.6. Fugitive Emissions to Surface Water, Sewer and Groundwater**

- 5.6.1. Fugitive releases to the groundwater will be prevented by conducting all operations in areas sealed with an impervious barrier to prevent a pathway for migration to ground and groundwater. In order to ensure all effluent is treated in the new effluent treatment system, the Installation will not separate process and non-process wastewater as all drainage will be diverted to the effluent treatment area prior to discharging to foul sewer. This eliminates the risk of fugitive emissions to surface water.

- 5.6.2. All potentially polluting liquids will be appropriately bunded providing a minimum capacity of either 110% of the capacity of the largest storage vessel or 25% of the total capacity of all the storage vessels within the bund, whichever is greater. This includes the subsurface effluent holding tank, the balancing tank and the alkaline and acid dosing vessels.
- 5.6.3. The proposed hydrogen peroxide tank will be integrally bunded providing 110% capacity of the tank in case of loss of containment or spillage.
- 5.6.4. Overfill protection will be on bulk storage vessels and barriers and signage will be in place to prevent the risk of vehicle collision with storage vessels and bunding.
- 5.6.5. Appropriate isolation system will be installed to prevent any uncontrolled releases to foul water. PB Gelatins personnel are capable of identifying, holding and preventing the release of any materials should equipment the new effluent treatment system fail and the effluent not being fully treated. There will be excess capacity (40%) to ensure a buffer capacity is available as part of the proposed effluent treatment activities.
- 5.6.6. All plant and equipment will be subject to regular maintenance and servicing as per the PB Gelatins maintenance programme contained within the Installation EMS. This will ensure all plant is in good working order to reduce the likelihood of fuel leakage at the Installation.
- 5.6.7. External examinations of all storage vessels is undertaken by a qualified engineer on an annual basis and any actions undertaken in accordance with the engineer's recommendations. Additionally, any evidence of spillage/loss of containment, as well as the site infrastructure, including bunding and impermeable concrete surfacing, is inspected weekly. If remedial action is required, this will be reported immediately and the issue rectified as soon as possible.
- 5.6.8. Any spillages at the Installation will be subject to the robust 'Emergency Preparedness and Response Plan' ("EPRP") (SHE 012) which includes spill response. This will prevent any potentially polluting materials from entering the Installation's drainage network.
- 5.6.9. All relevant employees are suitably trained in spill response, such as the deployment of absorbent materials and drain covers. Spill kits are strategically located around the Installation with the contents regularly inspected and maintained.

## **6. GENERAL REQUIREMENTS**

### **6.1. Emissions Management**

- 6.1.1. The Environmental Risk Assessment (“ERA”) (PBGE.01.09/ERA) has demonstrated that emissions of substances not controlled by emission limits (i.e. fugitive emissions) are not considered to be significant, consequently, an Emissions Management Plan is not required as part of this application.

### **6.2. Odour Management**

- 6.2.1. Following completion of the ERA, the Odour Management Plan (“OMP”) (EMS 5.01) has been updated to take account of the proposed activities detailing the potential odour sources and the associated control measures to ensure the risk of odour nuisance is not considered to be significant.

### **6.3. Noise Management**

- 6.3.1. It is not considered that the changes proposed as part of this variation will result in noise nuisance being experienced by sensitive receptors in the surrounding area.
- 6.3.2. The ERA has demonstrated that with strict adherence to the control measures set out in the ERA, risk of noise emissions beyond the Installation EP boundary is not considered to be significant. Consequently, a Noise Management Plan is not required as part of this application.

### **6.4. Pest Management**

- 6.4.1. As part of the Quality Management System (“QMS”) and the strict hygiene standards required for gelatine manufacture, a pest control system has been implemented at the Installation.
- 6.4.2. It is not considered that the changes proposed as part of this variation will lead to any significant increase in the attraction of pests to the Installation. The ERA demonstrates that with strict adherence to the control measures, the risk of pest nuisance is not considered to be significant. Consequently, a Pest Management Plan is not required as part of this application.

### **6.5. Fire Management**

- 6.5.1. The EPRP (SHE 012) has been implemented at the Installation which includes how to effectively manage and report incidents and potential emergency situations including fire.
- 6.5.2. The fire risk management measures implemented at the Installation are summarised in the application. The Fire Risk Assessment will also be updated. Through the implementation of the fire risk reduction programme, the overall risk is not considered to be significant.

## **7. APPLICATION SITE CONDITION REPORT**

- 7.1.** An updated Site Condition Report (“SCR”) (PBGE.01.09/SCR) has been prepared to take account of the proposed additional land to be included in the Environmental Permit boundary.

## **8. MONITORING**

### **8.1. Monitoring of Emissions to Air**

- 8.1.1. There is currently no requirement to undertake air emissions monitoring for the emission points denoted EP4 to EP19.
- 8.1.2. It should be noted that the capacity of the boiler and space heaters are less than 1 megawatt thermal (MWth). Therefore, they are not considered Medium Combustion Plants and it is not anticipated that there will be any monitoring requirements following the variation.
- 8.1.3. It is anticipated that PB Gelatins will be required to monitor odour concentrations annually once the updated Slaughterhouses and Animal By-products BRef comes into force.

### **8.2. Monitoring of Soil and Groundwater**

- 8.2.1. Fugitive releases will be prevented by conducting all operations in areas sealed with an impervious barrier to prevent a pathway for migration to ground or groundwater. Consequently, no additional monitoring of soil and groundwater is proposed in addition to the existing Permit Condition 3.1.3. in which periodic monitoring shall be carried out every 5 years for groundwater and every 10 years for soil. This was last completed in October 2022.

### **8.3. Monitoring of Surface Water**

- 8.3.1. There are no point source emissions (i.e. process contributions) to surface water proposed. Therefore, no monitoring of surface water is proposed as part of this variation application.

### **8.4. Monitoring of Foul Water**

- 8.4.1. It is proposed as part of this variation that the monitoring requirements in the Permit correspond to the monitoring undertaken by DCWW and PB Gelatins i.e. monthly suspended solid monitoring. The proposed monitoring for both DP1 and DP2 is as follows:
- pH – continuous;
  - suspended solids – monthly;
  - chemical oxygen demand – weekly; and
  - discharge flow - continuous.
- 8.4.2. Periodic monitoring will be undertaken by Welsh Water to ensure that PB Gelatins are adhering to their new Trade Effluent Consent.

## **9. RESOURCE EFFICIENCY AND CLIMATE CHANGE**

### **9.1. Energy**

- 9.1.1. A number of energy efficiency measures will be implemented at the Installation as part of the variation proposals to improve energy efficiency.
- 9.1.2. PB Gelatins entered into a Climate Change Agreement (“CCA”) on 1<sup>st</sup> October 2001. This CCA demonstrates PB Gelatins’ commitment to reducing energy consumption and associated carbon dioxide (“CO<sub>2</sub>”) emissions.
- 9.1.3. Following implementation of the variation proposals, energy consumption monitoring and reporting will allow PB Gelatins to set realistic but challenging improvement targets for energy reduction.

### **9.2. Raw Material Justification**

- 9.2.1. A breakdown of the raw material usage associated with the variation is provided within the application.
- 9.2.2. PB Gelatins will undertake an annual review of raw material usage and new developments in raw materials to investigate the possibility of replacing any suitable raw materials with those possessing an improved environmental profile.
- 9.2.3. Following implementation of the variation proposals, raw material consumption monitoring and reporting within the first year will allow PB Gelatins to set a baseline against which improvement targets can be set.

### **9.3. Waste Minimisation**

- 9.3.1. Waste minimisation measures have been incorporated during the design phase.
- 9.3.2. Following implementation of the variation proposals, waste production monitoring and reporting will allow PB Gelatins to set realistic but challenging improvement targets for waste minimisation.

## **10. COMPLIANCE WITH BAT CONCLUSION**

- 10.1.** The BAT requirements have been taken from the BRef for Waste Treatment (October 2018) and the BRef for Slaughterhouses and Animal By-products (May 2005). To future proof the proposals, the BAT requirements within the Final Draft of the BRef for Slaughterhouses and Animal By-products (March 2023) have also been assessed.
- 10.2.** It is noted that these BAT Conclusions apply without prejudice to other relevant legislation., such as food safety.
- 10.3.** It is considered that the techniques that will be in use at the Installation will constitute BAT and will be appropriate and proportionate to the scale of the activities at the Installation and the risks that are posed to the environment by the activities.