

# Substantial Permit Variation Application Non-Technical Summary

07 February 2023



#### **Document Control**

Client Etex Building Performance Ltd Principal Contact Stephen Hemmings

Project Number J10/12012B/10

Prepared By: Lucinda Hall

#### **Document Status and Review Schedule**

Document No.	Date	Status	Reviewed by
J10/12012B/10-R01-D01	7 February 2023	Final	Adam Clegg (Technical Director)

Logika Group is a trading name of Air Quality Consultants Limited (Companies House Registration No: 02814570), Noise Consultants Limited (Companies House Registration No: 10853764) and Logika Consultants Limited (Companies House Registration No: 12381912).

This document has been prepared based on the information provided by the client. Air Quality Consultants Ltd, Noise Consultants Ltd or Logika Consultants Ltd do not accept liability for any changes that may be required due to omissions in this information. Unless otherwise agreed, this document and all other Intellectual Property Rights remain the property of Air Quality Consultants Ltd, Noise Consultants Ltd and/or Logika Consultants Ltd. When issued in electronic format, Air Quality Consultants Ltd, Noise Consultants Ltd do not accept any responsibility for any unauthorised changes made by others.

Air Quality Consultants Ltd operates a formal Quality Management System, which is certified to ISO 9001:2015, and a formal Environmental Management System, certified to ISO 14001:2015.

When printed by any of the three companies, this report will be on Evolve Office, 100% Recycled paper.







# **Contents**

1	Non-Te	chnical Summary	1
	1.1 Intr	oduction	1
	1.2 Ete	x Building Performance Limited	1
	1.3 Site	Location and Environmental Setting	1
	1.4 Reg	gulatory Context	2
	1.5 Exis	sting Process Description	3
	1.6 Cha	inges Proposed to Existing Permit	4
	1.7 Pla	nning Consent	6
	1.8 Eco	logical Sensitive Receptors	6
	1.9 Hur	man Sensitive Receptors	7
	1.10 Ma	nagement & Control	8
	1.11 Nev	w Point Source Emissions	8
	1.12 Site	Condition Report	10
	1.13 Env	rironmental Risk Assessments	10
	1.13	.1 Generic Risk Assessment	10
	1.13	.2 Air Quality Assessment	10
	1.13	.3 Noise Impact Assessment	11
	1.13	.4 Assessment of Discharge to Sewer	11
	•	erational Techniques, BAT Assessment & Monitoring Plan	
	1.15 Site	Layout Plans	12
Tal	bles		
Tab	le 1-1	Ecological Sensitive Receptors	6
Tab	le 1-2	Human Sensitive Receptors	7
Tab	le 1-3	New Point Source Emissions to Atmosphere	9
Tab	le 1-4	New Point Source Emissions to Surface Waters	9
Tab	le 1-5	New Point Source Emission to Sewer	9



# **Figures**

Figure 1-1	Site Location	2
J		
Figure 1-2	Plasterboard Manufacturing Process	4
Figure 1-3	Planned Expansion Area	5
Figure 1-4	Location of Nearby Sensitive Receptors	8



## 1 Non-Technical Summary

## 1.1 Introduction

This non-technical summary has been prepared on behalf of Etex Building Performance Ltd to support an application submitted to the Environment Agency for a substantial variation to the existing Installation Permit (EPR/XP3036SZ) located in Easton-In-Gordano, Bristol. The existing Environmental Permit was originally issued in September 2006. The permit has subsequently undergone a number of variations, the most recent having been issued in November 2019 (EPR/XP3036SZ/V007) which incorporated changes to existing activities as well as having regularised and consolidated the permit.

The Permit Holder has secured £140m funding for a proposed expansion plan at their Bristol facility which will encompass approximately 11.4 hectares of land adjacent to the existing facility and double the capacity of the Bristol facility. The new plasterboard production line will create approximately 60 new jobs for the area and will increase site resilience within an expanding market.

## 1.2 Etex Building Performance Limited

The existing Permit holder is Etex Building Performance Limited. The Limited Company was incorporated on 14 September 1987. Etex group is a global business based in Belgium. The Etex Group have two plasterboard manufacturing sites in the U.K., the larger of the two sites is located within the Royal Portbury Docks area of Bristol, with a second smaller site in Yorkshire. Etex Building Performance Limited is one of the three leading plasterboard manufactures within the UK (occupying around 30% of the overall UK market), leading in processing recycled gypsum primarily sourced from construction sites (processing approximately ~65% of the UK market). The Company's registered office address is Gordano House, Marsh Lane, Easton-In-Gordano, Bristol, England, BS20 ONE. The currently appointed officers of the Company are listed below:

- Neil Martin Shaw (Company Secretary & Director);
- Jean-Louis Georges Bernard (Company Director); and
- Tanguy Marc Patrick Emmanuel Albert Vanderborght (Company Director).

## 1.3 Site Location and Environmental Setting

The Site is located on Redland Avenue within the Royal Portbury Docks area of Bristol (approximately 7.5 km to the northwest of Bristol city centre) and currently covers approximately 14h hectares of land. The site is surrounded by industrial land and disused land. The river Avon flows approximately 600 m to the east and north of the site, with the Severn Estuary (which is a designated Special Protection Area (SPA), Special Area of Conservation (SAC) Ramsar Site and Site of Special Scientific Interest (SSSI)), approximately 800 m to the north. The Avon Gorge Woodlands SAC is also just over 4km from the existing Facility.

The full site address is:

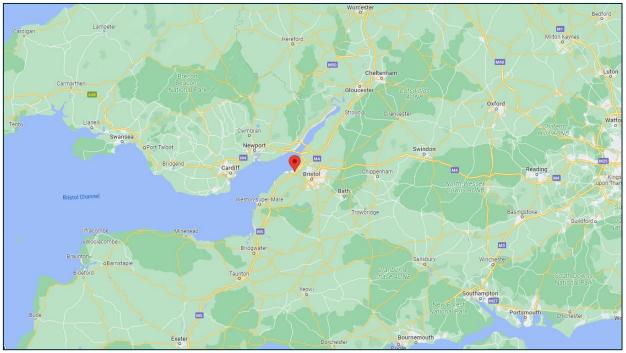
Etex Building Performance Limited
Redland Avenue
Easton-In-Gordano
Bristol
BS20 0FB

The existing Facility is centred at Grid Reference:

ST 50750 76980



Figure 1-1 Site Location



Source: Google Maps ©2022

## 1.4 Regulatory Context

The Environmental Permitting (England & Wales) Regulations 2016 (EPR), as amended, are applicable to a wide range of industrial sectors that have the potential to impact the environment through their activities. To operate a regulated facility, an Operator is required to obtain a permit by submitting an application to the relevant Regulator and operate that activity in accordance with the conditions imposed by the permit. The EPR also requires that the Operator of a permitted installation must inform the Regulator if any proposed changes in operation are not considered to be covered by the conditions of an existing Permit. A change in operation means:

"... a change in the nature or function, or an extension, of an installation which may have consequences for the environment."

Following review of the Environment Agency's RGN08 guidance, it is considered that the proposed changes are classified as a substantial change & therefore requiring a substantial variation application.

The Environment Agency have confirmed this during pre-application dialogue.

The installation's activities fall within the 'Combustion Activities' section of the Environmental Permitting (England and Wales) Regulations 2016, as amended (section 1.1 A1 (a)) as the aggregation of the appliances in which fuels are burned, exceeds 50MWth. However, the installation is not defined as 'Large Combustion Plant' (LCP) in accordance with the aggregation rules in the Industrial Emissions Directive (IED) as the largest appliance at the installation falls below the lower threshold and no combustion plant(s) greater than 15 MWth forms a common stack with an aggregated net rated thermal input exceeding 50 MWth. In any case, as the combustion plant are used for direct heating or drying, they are excluded under Article 28 (a) of the IED. As such, the emission limit values in Annex V of the IED and the Best Available Technique Associated Emission Levels (BAT-AELs) in the LCP BAT Conclusions do not apply.



Statutory Sector Guidance relevant to this application has been produced specifically for the Plaster Processes (Process Guidance Notes (PGN) 3/12). These guidance notes are currently being reviewed and are due to be updated, however new guidance is not anticipated to be published until 2023/24 at the earliest.

BREF for LCP BAT Conclusions (published 12/2021) and other Horizontal BREFs have been considered as part of the supporting BAT Assessment (e.g., Energy Efficiency BREF) however the principal BAT reference document remains the process guidance note specific to the plaster processing sector.

The existing permit does not currently require the Operator to have a Fire Prevention Plan (FPP) in place, although the permit does permit wastes to be accepted onto site. All post-consumer secondary gypsum materials accepted at the Bristol Facility are currently contractually obliged to conform to BSI PAS109 and, consequently, meet the end of waste tests for recycled gypsum from waste plasterboard. The need for an FPP to be produced in support this variation application was discussed during pre-application dialogue and the Operator was advised that the Environment Agency currently have no intention to introduce the requirement for FPPs for gypsum sector permits, given the low combustion risk of wastes to be handled. A FPP has therefore been screened out as not required to support this application.

Certain facilities, including new industrial installations or substantially refurbished facilities where the aggregated thermal input of combustion plant exceeds 20 MWth, must also meet the requirements of Schedule 24 of the EPR which incorporates the Energy Efficiency Directive (EED). Article 14 of the EED requires applicants to carry out a Cost Benefit Analysis (CBA) to assess the cost and benefits of utilising waste heat generated for use in local district heating and cooling networks or operating as high efficiency co-generation plant. The need for a CBA was also discussed during pre-application dialogue, and it was agreed that that a full CBA would not be required, providing sufficient justification is included within application to support screening out the need for formal assessment. Justification for this is provided within the Operational Techniques, BAT Assessment and Monitoring Plan submitted in support of this application.

A copy of all pre-application correspondence is provided as Appendices to the Operational Techniques, BAT Assessment and Monitoring Plan.

## 1.5 Existing Process Description

The original plasterboard manufacturing facility and warehouse commenced operations in 1989.

The current installation manufactures plasterboard conforming to BS EN 520. Gypsum rock and recovered plaster gypsum are the primary raw materials which are delivered to the site by ship and road and stored in an enclosed facility. The gypsum is then crushed, milled and heated, or fed into a calciner and heated, to produce heated, dried gypsum known as stucco. The stucco is combined with water and other additivities to produce a slurry which is then extruded, cut and dried to form plasterboard and coving. These materials are then temporarily stored on-site prior to dispatch to customers.

The process requires energy to dry/heat the raw materials. This energy requirement is provided by a number of direct fired natural gas dryers and other gas-fired burners in e.g., the calcination process. The principal emissions to air from the installation consequently comprise combustion gases from the combustion processes and particulate matter from the gypsum process.

There are no process discharges to sewer or surface water, with the only existing discharge point to surface water constituting uncontaminated rainwater run-off from buildings and other hardstanding areas.

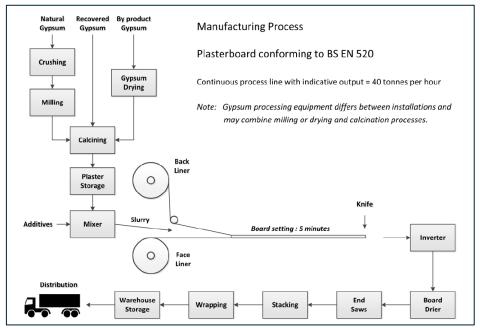
The existing permit covers two Schedule 1 listed activities and two DAAs. The two Schedule 1 activities include:

- Section 1.1 Part A(1)(a)(i) combustion activity, covering the combustion units used in the heating of the raw material and drying of plasterboard and coving where the aggregated net rated thermal input of all combustion units exceeds 50 MW; and
- Section 3.5 Part B(a) minerals activity covering the main plasterboard production process.



A high-level overview of the plasterboard manufacturing process is illustrated within the Process Flow Diagram (PFD) illustrated in Figure 1-2 below.

Figure 1-2 Plasterboard Manufacturing Process



Source: Etex Building Performance Ltd ©2022

## 1.6 Changes Proposed to Existing Permit

The Operator is intending to expand their manufacturing facility in Bristol and requires a variation to the site's current permit.

The new activities to be added to the permit will be identical to those currently permitted, however the new activities will constitute a Part A1 activity in their own right (>= 50MW thermal input in aggregate). The new activities to be added to the permit are as follows:

- Section 1.1 A1 (a)(i) Burning any fuel in an appliance with a rated thermal input of >50MW (aggregation of all units);
- Section 3.5 B (a) Unless falling within Part A(1) or Part A(2) of any Section of this Schedule, the crushing, grinding or size reduction, other than the cutting of stone, or the grading, screening or heating of any designated mineral or mineral product except where the operation of the activity is unlikely to result in the release into the air of particulate matter (plaster process).

Existing Directly Associated Activities (DAA's) listed within the permit will also apply to the new production line. These include reclamation of plasterboard and gypsum-based waste for use in the production process, including storage and screening; and operation of condensate recovery system.

The new production line will be installed in an area outside the existing permitted installation boundary. Consequently, the site boundary is to be extended to include an additional 11.4 hectares of land.

The new production line will be autonomous with the existing production process but will have a symbiotic relationship with the existing warehouses in order to maintain efficiency across the site and in the distribution and transport of finished product off site. The proposed new line seeks to increase and double the capacity of the existing operations at the site and will require new gas-fired burners to be installed to produce the energy required to manufacture the plasterboard.



The new production line will be located within a new warehouse to be constructed adjacent to the existing facility and will introduce a number of new point source emissions to atmosphere as well an additional point source discharge of uncontaminated surface run-off to surface waters, and a trade effluent to sewer. The main architectural elements of the proposed new development will include a new gatehouse and access control point; lines to the existing manufacturing facility; a new warehouse to house the new production line; offices above the plasterboard line; and a new gypsum store which will be fed from an extension from the existing conveyor belt, transferring gypsum from the port directly into the gypsum storage building, as well as a new truck wash unit. The existing plasterboard activities currently operate 24 hours a day, with the new plasterboard production line also anticipated to operate 24 hours a day.

There are no changes proposed to the existing plasterboard manufacturing line, however some of the Operational Techniques Documents currently referenced within Table 1.2 of the permit will be superseded as part of this variation. These include:

- Site Boundary and Layout Plan; and
- Site Drainage Plan;

The additional land to be added to the permit is illustrated within Figure 1-3 below.

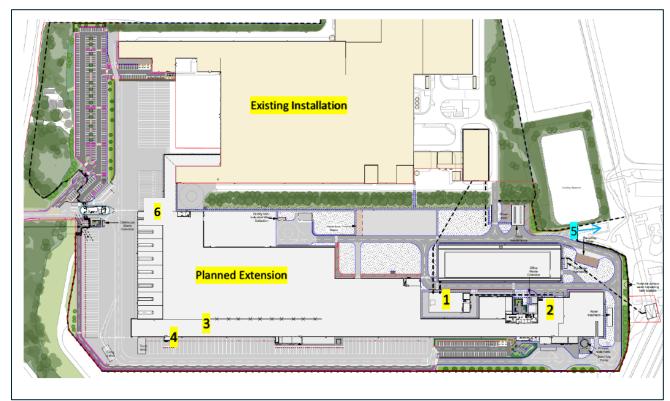


Figure 1-3 Planned Expansion Area

Image source: Etex Building Performance Ltd © 2022

#### **Key to Emission Points**

- ${\bf 1.} \quad {\bf To \ atmosphere: combined \ combustion \ and \ particulate \ emissions, \ calcination \ plant.}$
- 2. To atmosphere: particulate emissions from multiple emission points from dust filter/collector, raw materials preparation station.
- 3. To atmosphere: combustion emissions, plasterboard dryer (main stack).
- 4. To atmosphere: combustion emissions from twin stacks, plasterboard from plasterboard dryer heat exchanger.
- 5. To surface water: surface water run-off to River Avon via Bristol Port Company discharge point (Environment Agency discharge consent reference: 012039).
- 6. To sewer: effluent discharge from truck wash bay connection point to sewer.



## 1.7 Planning Consent

A full planning application for the development of the newly proposed plasterboard manufacturing line was submitted to North Somerset Council in September 2020, with full permission granted on 9 April 2021. The approval was for:

The erection of an extension to existing factory and warehouse premises; remodelling and expansion
of vehicle parking and circulation areas; erection of a new gatehouse; and replacement and
remodelling of conveyor structure to the north of the main site.

A copy of the planning consent is provided as an Appendix to the Operational Techniques, Monitoring and BAT Assessment Report.

## 1.8 Ecological Sensitive Receptors

Searches were carried out using data sources including the government website 'www.magic.defra.gov.uk' to establish all ecological sensitive receptors within close proximity to the existing site.

The site does not lie within a designated Area of Outstanding Natural Beauty (AONB) or within a Local Authority designated Air Quality Management Area (AQMA).

The site is however situated within relevant Environment Agency screening distances to several designated sites. Details of each sensitive ecological receptor is listed below and summarised within Table 1-1.

- The Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA), RAMSAR and Special Scientific Interest (SSSI) situated to the North and North-West of the existing site (with the closest point approximately 340m from the nearest stack);
- The Avon Gorge Woodlands SAC and SSSI situated to the South-East of the existing site (with the closest point approximately 4,000m from the nearest stack);
- Hails Wood Ancient Woodland (AW) situated to the South-South-East of the existing site (with the closest point approximately 1,650m from the nearest stack);
- Longlands Wood AW situated to the South-South-West of the existing site (with the closest point approximately 1,600m from the nearest stack); and
- St George's Flower Bank Local Nature Reserve (LNR) situated to the South of the existing site (with the closest point approximately 1,500m from the nearest stack).

There are no other RAMSAR, SAC or SPA designated habitat areas within the Environment Agency's 10km screening distance. There are also no National Nature Reserves (NNR) or other SSSI's, LNRs or AWs within the Environment Agency's 2km screening distance.

Table 1-1 Ecological Sensitive Receptors

Receptor	Receptor Type	Distance	Direction
The Severn Estuary	(SAC) (SPA) (RAMSAR) (SSSI)	340 m	N & NW
St George's Flower Bank	(LNR)	1,500m	S



Longlands Wood	(AW)	1,600m	SSW
Hails Wood	(AW)	1,650m	SSE
The Avon Gorge Woodlands	(SAC) and (SSSI)	4,000m	SE

## 1.9 Human Sensitive Receptors

There are also several human sensitive receptors within close proximity to the existing site and proposed expansion area. The nearest human sensitive receptors are listed within Table 1-2 below.

**Table 1-2 Human Sensitive Receptors** 

Receptor	Receptor Type	Distance	Direction
Marsh Lane	Commercial/Residential Nearest non-roadside human receptor	250m	S
Marsh Lane	Residential Nearest roadside human receptor	900m	S
Beechwood Road	Residential	1,000m	SE
Gloucester Road	Residential	1,100m	NNE
The Breaches	Residential	1,100m	SE
Avon Road	Residential	1,200m	ESE
West Town Road	Residential	1,250m	W
Portway	Residential	1,300m	W
Sheepway	Residential	1,300m	SW
St Mary's School	Commercial / School	1,450m	SSW
Portview Road	Residential	1,500m	NE
B4054	Residential	1,600m	NE
Station Road	Residential	1,600m	SW
Wharf Lane	Residential	1,850m	W
Wren Garden	Residential	2,300m	NW
Oakhill Lane	Residential	5,000m	NE



Locations of all ecological and human sensitive receptors are illustrated within Figure 1-4 below. The location of the site is illustrated in green, whilst Ecological Sensitive Receptors are labelled as 'ESR' whilst Human Sensitive Receptors are labelled as 'HR'.

Total Control of the Control of the

Figure 1-4 Location of Nearby Sensitive Receptors

Image source: Grid Reference Finder © 2022

## 1.10 Management & Control

The Environment Agency relies heavily upon the use of effective Environmental Management Systems (EMS) as a driver for environmental compliance and continual improvement in performance.

The Operator has an existing comprehensive Environmental Management System (EMS) in place which meets ISO14001:2015 standard. The existing EMS's Standard Operating Procedures (SOPs) will be updated to include the Operations, Maintenance and Monitoring of the new production line. These existing procedures and systems will be adapted to govern the day-to-day operational activities for both the existing and new production lines. This will include the roll out of existing accident management and emergency procedures.

Further details of the Operators EMS is provided within the Operational Techniques, Monitoring and BAT Assessment Report, submitted in support of this application.

## 1.11 New Point Source Emissions

The current permit has a number of existing point source emissions to air listed within Schedule 3, which have associated emission limits and monitoring requirements.

The permit also references a single point emission to water (point source discharge to surface waters) from the existing installation.



This substantial variation looks to add several new point source emissions to the permit. These include new point source emissions to air associated with the new processing line, as well as an additional point source emission to surface waters from the expansion area.

These new emission points will not replace existing emission points. All activities associated with the existing plasterboard production line are to remain unchanged.

Table 1-3, Table 1-4 and Table 1-5 below summarise the additional point source emissions to be included within the permit.

There are no other point source emissions associated with the newly proposed plasterboard production line.

Table 1-3 New Point Source Emissions to Atmosphere

Emission Point Reference and Location	Source of Emission	Emissions
A31	Exhaust Stack - Dryer Prezone	H₂O
A32 & A52	Heat Exchangers	NOx, CO, H2O
A33	Dedusting System - Stucco Silo	PM <sub>10</sub>
A34	Dedusting System - Stucco Circuit	PM <sub>10</sub>
A35-A36, A38-A47	Dedusting (combined stack)	PM <sub>10</sub>
A37	Dedusting Dust Collector - Bulk Bag Unloading	PM <sub>10</sub>
A48	Dedusting Dust Collector - Mixer	PM <sub>10</sub>
A49	Main Exhaust Air Stack (Calcination Area)	NOx, CO, PM <sub>10</sub>
A50	Dedusting System Dividing Saw (Calcination Area)	PM <sub>10</sub>
A51	Emergency Stack (Calcination Area)	NOx, CO, PM <sub>10</sub>

## **Table 1-4** New Point Source Emissions to Surface Waters

Emission Point Reference and Location	Source of Emission	Emissions
W2	Site run-off from new plasterboard production line warehouse and surrounding area	Clean, uncontaminated surface water run-off only

## Table 1-5 New Point Source Emission to Sewer

Emission Point Reference and Location	Source of Emission	Emissions
---------------------------------------	--------------------	-----------



F2	Effluent run-off from Truck Wash Bay	Sulphates, suspended solids, Hydrocarbons
----	--------------------------------------	---

## 1.12 Site Condition Report

A Site Condition Report (SCR) is required to support this variation application, as the changes proposed to the existing permit include the addition of 11.4 hectares of land to accommodate the new production line warehouse and supporting infrastructure. This land currently sits outside of the permit boundary. The boundary line thus needs to be extended to incorporate the new area.

The overall site boundary line for the existing installation has also been altered slightly in some areas (expanded) to regularise the boundary line, and better reflect the physical perimeter of the site and ownership of the land.

A SCR has been prepared in accordance with the Environment Agency's H5 Guidance Template, in order to describe the condition of the land and groundwater of the area of land to be added to the permit as part of this substantial variation. This report should be read in conjunction with the original SCR submitted at the time of permit application.

The report has collected information regarding the substances to be used as part of the permitted processes to be undertaken within the expansion area and has produced an environmental risk assessment specifying the hazards from the proposed operations, which have the potential to impact on nearby environmental receptors.

The new area of land to be used to added was previously a coal stock yard. A comprehensive quantified baseline has been established to fully consider past pollution history of the additional land, and for the level of contamination of soil and groundwater with relevant hazardous substances to be fully assessed, in order that a comparison can be made in future, following the cessation of permitted activities and ultimate surrender of the permit.

A copy of the SCR has been submitted in support of this application as a standalone report.

#### 1.13 Environmental Risk Assessments

#### 1.13.1 Generic Risk Assessment

An Environmental Risk Assessment (ERA) has been completed as part of the preparatory work undertaken to support this permit variation application. The assessments undertaken have followed relevant guidance specified within the Environment Agency's Risk Assessment online guidance.

A number of assessments have been considered to determine the environmental risks posed by the new production line, and to identify whether the level of risk is considered acceptable. The risk assessment does not assess existing activities that will remain unchanged, as these have already undergone assessment and are authorised under the existing permit.

The principal risks from the newly proposed activities will be emissions to atmosphere from the combustion processes; particulate matter from the gypsum process; and the potential for impact of noise from the new line.

## 1.13.2 Air Quality Assessment

Pre-application dialogue with the Environment Agency confirmed that a bespoke quantitative Air Quality Modelling Assessment would be required to support this application. Detailed Air Quality Modelling has



therefore been undertaken to fully assess emissions to atmosphere from all equipment and infrastructure associated with the proposed new plasterboard production line.

The principal risks from emissions produced from the newly proposed manufacturing facility will be Nitrogen Dioxide ( $NO_2$ ), Particulate Matter ( $PM_{10}$  and  $PM_{2.5}$ ) for human health, and Nitrogen Oxides ( $NO_2$ ) and nutrient and acid nitrogen deposition for ecological receptors.

Modelling was carried out in line with Environment Agency guidance and impacts were predicted using the ADMS-5.2 dispersion model developed by Cambridge Environmental Research Consultants (CERC). A copy of the full Air Quality Assessment is provided as an Appendix to the Environmental Risk Assessment (ERA) report, submitted in support of this application.

The Air Quality Assessment concluded that:

- there is no risk that any of the Air Quality Standards (AQS) for the protection of human health will be exceeded as a result of the additional production line at the facility, at any relevant receptor. On this basis, the impacts are judged to be not significant;
- The impacts at designated ecological sites are either insignificant or will not cause an exceedance of any AQS, with the exception of one location within the Severn Estuary SAC where the AQS for annual mean NOx is exceeded with or without the Process Contribution (PC) from the installation. The NOx impacts were subject to a shadow HRA Appropriate Assessment at planning stage and agreed with Natural England to be not significant.

The assessment overall concluded that the air quality impacts from the proposed new manufacturing facility will be not significant.

#### 1.13.3 Noise Impact Assessment

A Noise Impact Assessment (NIA) was completed by Acoustical Control Engineering Consultants Ltd (ACEC) in July 2020 to assess the potential impact of noise and vibration from the proposed new plasterboard production line process on nearby noise sensitive receptors. The assessment was prepared considering a number of relevant guidance documents, including BS4142: 2014 standards. A copy of this acoustic assessment has been provided as an Appendix to the Environmental Risk Assessment (ERA) report, submitted in support of this application.

Given that the above assessment was completed during the first national lockdown of the Covid-19 Pandemic, environmental sound levels were considered atypical as a result of significantly reduced traffic flows. It was decided that a second Noise Impact Assessment would be required to ensure background data recorded was representative.

This additional NIA was undertaken at the end of 2022 / early 2023 by Noise Consultants Ltd which included additional background noise monitoring. The assessment concluded that the newly proposed activities would not result in an unacceptable noise impact at nearest noise sensitive receptors.

A copy of this report is also provided as an Appendix to the Environmental Risk Assessment (ERA) report.

#### 1.13.4 Assessment of Discharge to Sewer

An H1 assessment was completed to assess the potential impact of trade effluent discharges from the proposed new truck wash bay on receiving waters, via a sewage treatment works. Sewage from the site is sent to Portbury Wharf Sewage Treatment Works (STW) which discharges to the Severn Estuary (Estuary and Coastal Waters).



The H1 assessment concluded that the Process Contributions (PCs) for determinands (where relevant Environmental Quality Standards (EQS) apply), are below the 4% threshold and can therefore be considered insignificant and no further modelling was required.

## 1.14 Operational Techniques, BAT Assessment & Monitoring Plan

An Operating Techniques, BAT Assessment & Monitoring Plan has been prepared as part of this permit variation application to provide details of the operational techniques that will be used to minimise and control emissions from the proposed new production line and to demonstrate that the technology selection and control measures to be implemented follow Best Available Techniques (BAT).

Details are also included on the proposed Monitoring Programme for the new production line in addition to procedures for managing accidents, abnormal operations or emergency scenarios on site.

The techniques submitted with this application have been prepared to specifically address the operations to be undertaken at the newly proposed production line, and do not replace operational techniques which relate to the existing manufacturing facility.

## 1.15 Site Layout Plans

A number of drawings have been submitted in support of this application, to provide details of the additional land to be added to the existing permitted boundary line, as well as the location of the newly proposed plasterboard production line building, and associated infrastructure. Further plans include Process Flow Diagrams (PFDs) site layout plans, drainage plans and P&IDs. These are all provided within the drawings section of this application.