

Permitting Decisions- Bespoke Permit

We have decided to grant the permit for The Rudheath Bakery Site operated by Frank Roberts & Sons Limited.

The permit number is EPR/WP3503LX.

Frank Roberts site is located in Rudheath, within the town of Northwich, in Cheshire, 16km southeast of Warrington and 30km southwest of Manchester.

Frank Roberts is a bakery and has operated on this site since 1952. The factory consists of five oven plants housed in three buildings, processing vegetable and animal raw materials into baked food products. Following the building of Bread Plant 3, containing the fifth oven, the physical capacity of the plant has exceeded the 300 tonnes per day production capacity, which requires the business to have a bespoke Environmental Permit to operate. The new bread plant came in to full production in July 2018. The maximum daily theoretical production capacity for the site is now 422 tonnes per day.

The site has three discharge consents with United Utilities plc, for disposal to foul sewer of the trade effluent produced by the processes.

There are four main plants with a total of 59 point sources (stacks), which release emissions to air generated from the baking processes, (ovens, extractors and boilers). Detailed dispersion modelling has been undertaken to assess the pollutant emissions to air. The assessment has considered impacts from emissions of Particulate Matter (PM_{10} and $PM_{2.5}$), Carbon Monoxide (CO), Oxides of Nitrogen (NO_x as NO_2), and Sulphur Dioxide (SO_2).

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision-making process. It:

- summarises the decision making process in the <u>decision considerations</u> section to show how the main relevant factors have been taken into account
- highlights key issues in the determination
- shows how we have considered the consultation responses

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit.

Key issues of the decision

Best Available Techniques (BAT) Assessment

The BAT conclusions for the food, drink and milk industries were published by the European Commission on 19 December 2019. The scheduled activity introduced by this application is required to comply with all relevant BAT conclusions (BATc). We have reviewed the key measures proposed by the Operator for this application and assessed them against the relevant BAT requirements.

Compariso	Comparison of BAT with key measures proposed by the operator						
BAT ref.	Indicative BAT	Key measures proposed					
		The site is implementing an EMS in accordance with ISO14001. Permit conditions and					
1	EMS	site compliance will ensure that BATc 1 is complied with.					
1	LIVIS	We have assessed the information provided and we are satisfied that the operator has					
		demonstrated compliance with BATc 1.					
	EMS – inventory of inputs &	The site will operate with an EMS in place with resource efficiency requirements (as					
2	outputs to increase resource	per permit conditions).					
	efficiency and reduce	We have assessed the information provided and we are satisfied that the operator has					
	emissions.	demonstrated compliance with BATc 2.					
		The site has three discharge points to the foul sewer, discharges of trade effluent to					
		the sewer are made under a trade effluent consent from the sewage undertaker.					
		Effluent from the site is monitored on a monthly basis by the sewage undertaker. This					
		is to confirm the site is meeting the consent parameters for COD, pH, SS and Oils &					
		Grease. In addition the site undertakes monthly monitoring of surface water					
3	Emissions to water – monitor	discharges to the local watercourse.					
	key process parameters						
		Process effluent is currently discharged to the foul sewer with no form of treatment.					
		The Operator is required to review the use of primary treatment on site and the					
		appropriate use of on-site monitoring.					
		We consider that the Operator will be future complaint with BATc3 following the					
		completion of IC6.					
		The emissions of uncontaminated surface water from non-operational areas via an					
		interceptor are to Gad brook. There is no requirement to monitor these emissions.					
4	Monitor emissions to water						
		site compliance will ensure that BATc 1 is complied with. We have assessed the information provided and we are satisfied that the operator demonstrated compliance with BATc 1. The site will operate with an EMS in place with resource efficiency requirements (a per permit conditions). We have assessed the information provided and we are satisfied that the operator demonstrated compliance with BATc 2. The site has three discharge points to the foul sewer, discharges of trade effluent the sewer are made under a trade effluent consent from the sewage undertaker. Effluent from the site is monitored on a monthly basis by the sewage undertaker. Is to confirm the site is meeting the consent parameters for COD, pH, SS and Oils & Grease. In addition the site undertakes monthly monitoring of surface water discharges to the local watercourse. Process effluent is currently discharged to the foul sewer with no form of treatment The Operator is required to review the use of primary treatment on site and the appropriate use of on-site monitoring. We consider that the Operator will be future complaint with BATc3 following the completion of IC6. The emissions of uncontaminated surface water from non-operational areas via an interceptor are to Gad brook. There is no requirement to monitor these emissions Process effluent is currently discharged to the foul sewer with no form of treatment the Operator is required to review the use of primary treatment on site and the appropriate use of on-site monitoring. We consider that the Operator will be future complaint with BATc4 following the completion of IC6.					
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	Monitor channelled emissions	; =					
5	to air						
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6	Energy efficiency						
_	, ,	The Operator measures energy consumption and benchmarks progress against KPI's.					

		Projects are identified on an ongoing basis through continuous improvement which can contribute to meeting energy efficiency targets. In addition the site implements a range of energy efficiency techniques such as; • burner regulation and control; • minimising blowdown from the boiler; • reducing heat losses by insulation; • lighting – on going program to update lighting to LED lights; and • reducing compressed air system leaks. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6.
7	Water and wastewater minimisation	Water recycling opportunities are review as part of the sites continuous improvement process and have delivered water saving opportunities including cooling water and condensate returns. In addition the site uses pressure controlled spray heads where appropriate, dry cleaning and removal of solid wastes prior to washing. Staff are encouraged to follow 'clean as you go' principles to minimise waste entering the drain. The onsite vehicle wash recycles water from the rinse process. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7.
8	Use of harmful substances	The Operator has provided information on the raw materials stored at the site. Only cleaning chemicals appropriate to meet customer and food standards are used on site. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.
9	Use of refrigerants	All chiller and cooling units are charged with a range of F-gases and are managed in accordance with the requirements of the F-gas regulations. The Operator has provided an inventory of the refrigerants used on site and the units and/or refrigerants will be replaced on a rolling basis, selecting a medium with a low Global Warming Potential (GWP) and in line with third party specialist advice. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.
10	Resource efficiency	The Operator has provided information on the waste minimisation techniques used at the site. The site operates a zero waste to landfill policy. All waste streams are segregated including food waste that is sent off site for conversion to animal feed avoiding landfill. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.
11	Emissions to water – waste water buffer storage	The majority of the northern section of the site is covered in hardstanding with some landscaped areas. The southern section of the site is currently undeveloped. Only small amounts of uncontaminated surface water is discharged to the Gad Brook via an interceptor. The majority of site surface water enters the combined sewerage system and is treated at the local sewage treatment works. The site has procedures in place should an incident occur, including the use of spill kits. All other site drainage including from that process areas is to sewer. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11.
12	Emissions to water - treatment	Only uncontaminated surface water originating from non-operational areas of the site are discharged directly to surface water via an interceptor. Onsite interceptors are managed as part of the sites plan preventive maintenance system as they form part of the sites critical pollution control infrastructure. We have assessed the information provided and are satisfied that the BAT AELs stated in BATc 12 do not apply to the site.

		Process effluent is currently discharged to the foul sewer with no form of treatment. The Operator is required to review the use of primary treatment on site and the appropriate use of on-site monitoring. We consider that the Operator will be future complaint with BATc12 following the completion of IC6.
13	Noise – management plan (NMP)	BATc 13 is only applicable for sites where noise nuisance at sensitive receptors is expected and/or has been substantiated. The site has no recent history of noise complaints therefore a noise management plan is not required. As part of the EMS the operator has in place all the components of an noise management plan which includes a protocol for actions and timelines in the event of an incident, monitoring and responding to noise incidents, inventory of noise sources, risk assessment and operational controls aimed at preventative maintenance, management, monitoring and inspection of all potential sources. We are satisfied that BATc 13 is not applicable to this Installation.
14	Noise minimisation	 The site has implemented several noise minimisation techniques to reduce noise nuisance beyond the site boundary. Procedures in place as relevant: Closed door policy (The majority of plant or equipment with the potential to create noise is internal or enclosed (e.g. compressors, boilers, all processing equipment) All main assets are subject to planned preventative maintenance The switching off of tankers and delivery fleet engines while off-loading. Noise and low noise options are considered as part of the design specification for all new equipment. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.
15	Odour – management plan	There has been no substantiated odour nuisance from the site. The site has an Odour Management Plan summarising potential odour emission points and control measures We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 15.

1) Air quality assessment

The Operator used the Environment Agency's H1 methodology to assess the releases from the proposed new stacks on local air quality in the context of applicable air quality standards and accepted environmental benchmarks for conservation sites.

The H1 methodology uses a concept of "process contribution (PC)", which is the estimated concentration of emitted substances after dispersion into the receiving environmental media at the point where the magnitude of the concentration is greatest. The H1 guidance provides a simple method of calculating PC primarily for screening purposes and for estimating process contributions where environmental consequences are relatively low. It is based on using dispersion factors. These factors assume worst case dispersion conditions with no allowance made for thermal or momentum plume rise and so the process contributions calculated are likely to be an overestimate of the actual maximum concentrations.

More accurate calculation of process contributions can be achieved by mathematical dispersion models.

Once short-term and long-term PCs have been calculated, they are compared with Environmental Standards (ES), for example, Ambient Air Directive limit values, or UK Environmental Assessment Levels (EALs), referred to as "benchmarks" in the H1 Guidance. PCs are considered insignificant if:

- the short term PC is less than 10% of the short term environmental quality standard; and
- the long term PC is less than 1% of the long term environmental quality standard.

Where an emission cannot be screened out as insignificant at the first stage, it does not mean it will necessarily be significant. For pollutants that do not screen out as insignificant the exceedances of the relevant ES are assessed by considering the PEC (Predicted Environmental Contribution) which takes account of the background pollutant concentrations. We consider the environmental risk not to be significant where the following criteria are met:

- the short term PC is less than 20% of the short term environmental standard minus twice the long term background concentration; and
- the long term PEC is less than 70% of the long term environmental standard.

When the above conditions cannot be verified through the H1 screening exercise, our guidance requires that a detailed modelling assessment is carried out by using computer software that model the dispersion of a substance as it travels through the atmosphere until it reaches the ground.

The site has increased its production capacity beyond the threshold limit of 300 tonnes per day, as part of the application an H1 assessment was undertaken. The outcome of the H1 indicated the requirement to undertake detailed modelling of the key pollutants associated with operations undertaken at the site. There are four main plants with a total of 59 point sources (stacks), which release emissions to air generated from the baking processes. The emissions from each building are discharged directly to atmosphere at, or just above, roof level.

The applicant's assessment of the impact to air quality is set out in the submitted report (Report Ref Frank Roberts & Sons Ltd, Detailed Modelling Assessment dated February 2021) which was submitted as part of the application. The objectives of the study were to assess the impact of emissions from all onsite stacks on ambient air quality in order to determine whether there is an impact on

the surrounding area. The modelling considered the potential impacts associated with the emissions to air from site looking at Particulate Matter (PM_{10} and $PM_{2.5}$), Carbon Monoxide (CO), Oxides of Nitrogen (NO_x as NO_2), and Sulphur Dioxide (SO_2). The assessment comprises the following information that we consider relevant to the risk posed by the installation:

- Dispersion modelling of emissions to air from the operation of the installation.
- A study of the impact of the emissions on nearby human receptors and conservation sites.

The screening assessment shows that the emissions could not be screened out and a detailed assessment with air dispersion modelling was submitted. This section of the decision document covers the dispersion modelling all emissions to air from the installation and the impact on local air quality. The installation lies within the relevant screening distances from the statutorily protected ecological sites; West Midlands Mosses SAC (Special Area of Conservation) and Midland Meres and Mosses Phase 1 & Phase 2 Ramsar. Refer to the section below for additional information on the impacts on ecological receptors.

The Operator has assessed the installation's emissions to air using the Atmospheric Dispersion Modelling System ADMS 5.2, which is a commonly used computer model for regulatory dispersion modelling. The model used meteorological data collected at Rostherene weather station, which is located approximately 17.7km north-west of the permitted site.

We have reviewed the applicant's air dispersion model and its selection of input data, use of background data and the assumptions made to inform the assessment. We have also carried out a screening exercise using an air dispersion screening tool developed by the Environment Agency and based on the US EPA AERMOD air dispersion model to confirm the quality of the applicant's model predictions.

Three different scenarios were assessed as part of the assessment;

- SC1 All processes running 100% theoretical production capacity;
- SC2 Intermediate scenario, to assess the impact at a reduced production rate from Scenario 1, but higher than the Scenario 3 production rate. The model inputs have remained constant with a factor adjustment applied to the long term mean model outputs based on a plant operation capacity of 85%; and
- SC3 All processes running based on actual manufacturing output provided by the Operator. As above, model inputs have remained constant with factor

adjustment applied to the long term mean model outputs for each group of sources.

In order to consider a conservative approach SC1 was used. This approach is consider to be precautionary and is considered to be the 'worst-case scenario'.

Assessment of impacts of air emissions on human receptors

The tables below, show the maximum concertation of the named pollutants over a five year period at the sensitive receptor locations. The receptor with the highest identified process contribution has been assessed to represent the worst case scenario.

Table 1: Concentrations of NO ₂ at the sensitive receptor of maximum prediction							
Pollutant	ES (μg/m³)	PC (μg/m³)	PC as % of ES	Background (long term) (µg/m³)	PEC (μg/m³) (PC + long- term background)		
NO ₂ (annual)	40	7.07 Note 1	17.7	12.28	19.35		
NO ₂ (99.79th %ile of hourly average)	200	40.66 Note 2	20.3	24.56 Note 3	65.22		

PC - Process Contribution; ES - Environment Standard; PEC - Predicted Environmental Concentration

Table 1 shows that the long term (annual) process contributions (PC) are greater than 1% of the environmental standard (ES) and the short term PC are greater than 10% of the short term ES. As such both required further assessment to determine the impact of the long and short term emissions on the predicted environmental concertation (PEC). The long term PEC is significantly below the ES, as such we consider that the long term emissions of NO₂ are unlikely to breach the long term ES. The short term PEC is also significantly below the short term ES as such we consider that the short term emissions of NO₂ are unlikely to breach the short term ES.

Table 2: Concentrations of SO ₂ at the sensitive receptor of maximum prediction							
Pollutant	ES (μg/m³)	PC (μg/m³)	PC as % of ES	Background (long term) (µg/m³)	PEC (μg/m³) (PC + long- term background)		
SO ₂ (24 Hour)	125	22.07 Note 1	17.7	15.46 Note 2	37.53		

Note 1 – The location with the highest predicted concentration is R31 (367919,372720)

Note 2 – The location with the highest predicted concentration is R1 (367859, 372571)

Note 2 – the short term background concentration is considered to be twice the long term concentration.

SO ₂ (99.79th %ile of hourly average)	350	45.07 Note 1	12.9	15.46	60.53
SO ₂ (99. 9th %ile of 15 minute average)	266	49.82 Note 1	18.7	15.46	65.28

PC - Process Contribution; ES - Environment Standard; PEC - Predicted Environmental Concentration

Note 1 – The location with the highest predicted concentration is R1 (367859,372571)

Note 2 – the short term background concentration is considered to be twice the long term concentration.

Table 2 shows that the short term PC's are greater than 10% of the short term ES. As such further assessment to determine the impact of the short term emissions on the PEC is required. For each of the short term periods the PEC is significantly below the short term ES as such we consider that the emissions of SO₂ are unlikely to breach the ES.

Table 3: Conce	Table 3: Concentrations of PM ₁₀ at the sensitive receptor of maximum prediction							
Pollutant	ES (μg/m³)	PC (μg/m³)	PC as % of ES	Background (long term) (µg/m³)	PEC (μg/m³) (PC + long- term background)			
PM ₁₀ (annual)	40	1.31 Note 1	3.3	11.06	12.37			
PM ₁₀ (90.1th %ile of 24 hour average)	50	3.11 Note 1	No further asses	ssment required a 0% of the ES.	s the short term			

PC - Process Contribution; ES - Environment Standard; PEC - Predicted Environmental Concentration

Note 1 – The location with the highest predicted concentration is R32 (367999,372731)

Note 2 – the short term background concentration is considered to be twice the long term concentration.

Table 3 shows that the long term PC is greater than 1% of the ES. The short term PC is less than 10% of the short term ES and no further assessment is required. Further assessment of the long term PC is required to determine the impact of the long term emissions on the PEC. For the long term period the PEC is significantly below the long term ES as such we consider that the emissions of PM_{10} are unlikely to breach the relevant ES.

Table 4: Concentrations of PM _{2.5} at the sensitive receptor of maximum prediction							
Pollutant	ES (μg/m³)	PC (μg/m³)	PC as % of ES	Background (long term) (µg/m³)	PEC (μg/m³) (PC + long- term background)		
PM _{2.5} (annual)	20	1.31 Note 1	6.55	7.20	8.51		

PC - Process Contribution; ES - Environment Standard; PEC - Predicted Environmental Concentration

Note 1 – The location with the highest predicted concentration is R32 (367999,372731)

Note 2 - the short term background concentration is considered to be twice the long term concentration.

Table 4 shows that the long term process contributions PC are greater than 1% of the ES. Further assessment of the long term PC is required to determine the impact of the long term emissions on the PEC. For the long term period the PEC is significantly below the long term ES as such we consider that the emissions of PM_{2.5} are unlikely to breach the relevant ES.

Table 5: Concentrations of CO at the sensitive receptor of maximum prediction							
Pollutant	ES (μg/m³)	PC (μg/m³)	PC as % of ES	Background (long term) (µg/m³)	PEC (μg/m³) (PC + long- term background)		
CO (1-hour)	30,000	450.36 Note 1	No further assessment required as the short term PC is less than 10% of the ES.				
CO (8 hour running average across a 24-hour period)	10,000	263.89 Note 2	No further assessment required as the short term PC is less than 10% of the ES.				

PC - Process Contribution; ES - Environment Standard; PEC - Predicted Environmental Concentration

Table 5 shows that the PC for both short term periods is less than 10% of the short term ES as such no further assessment of the PC is required.

We agree with the applicant's conclusions that the combustion processes on site are unlikely to exceed the air quality standards for all modelled pollutants at the discrete receptor locations in the area.

Assessment of impacts of air emissions on ecological receptors

The air dispersion modelling report included an assessment of the impacts on the statutorily conservation sites within the relevant screening distance of 10km. The installation lies within the screening distance from three European sites protected under the Conservation of Habitats and Species Regulation 2017. There are no SSSI (Site of Special Scientific Interest) within the relevant screening distance. The following European sites are found within 10km:

- West Midlands Mosses SAC (UK0013595).
- Midland Meres and Mosses Phase 2 Ramsar (UK11080).
- Midland Meres and Mosses Phase 1 Ramsar (UK11043).

Our review of the applicant's assessment has lead us to agree with the conclusions of the applicant's air dispersion model and assessment of impacts on the

Note 1 – The location with the highest predicted concentration is R4 (367996,372424)

Note 2 – The location with the highest predicted concentration is R1 (367859,372571)

applicable European conservation sites within relevant screening distance as follows:

- The long term (annual average) predicted PC of nitrogen oxides are below the significance screening threshold of 1% of the nitrogen oxides long term critical level at all the receptors within European sites requiring assessment.
- The short term (24 hours) predicted PC of nitrogen oxides are below the significance screening threshold of 10% of the nitrogen oxides 24 hours critical level at all the receptors within European sites requiring assessment.
- The long term (annual average) predicted PC of sulphur dioxide is below the significant screening threshold of 1% of the sulphur dioxide long term critical level at all the receptors within European sites requiring assessment.
- The long term (annual average) predicted process contribution of nitrogen oxides deposition, as nutrient nitrogen, are below the significance screening threshold of 1% of the nutrient-nitrogen critical load at all the receptors within European sites requiring assessment, where these critical loads are specified.
- The long term (annual average) predicted process contribution of nitrogen oxides deposition, as pollutants responsible for acidification, are below the significance screening threshold of 1% of the acid function critical load at all the receptors within European sites requiring assessment, where these critical loads are specified.

We have therefore concluded that the variation is not likely to cause significant impacts to the protected European sites.

Conclusion

We agree with the Operator's conclusions that the results of the dispersion modelling indicate the impacts of the pollutant concentrations are not predicted to be significant at any of the sensitive human or ecological receptor locations. The impacts were assessed on a conservative approach including the assumption that all of the combustion processes will be running 100% of theoretical capacity. As such the predicted pollutant concentrations are likely to be an over estimate of actual emissions.

2) Energy Efficiency

Energy efficiency is being been driven by several methods across the business. All new equipment purchased is signed off by the HSE department to ensure agreement on energy and environmental efficiency. Structural changes have been made across the site to reduce energy consumption such as PIR (passive infrared sensor) and a large scale LED lighting upgrade. The site has incoming metering and a programme of sub-metering has been initiated for electricity monitoring key pieces of plant and equipment and buildings across the site with the aim of targeted reduction in usage.

The site purchases renewably sourced electricity. A robust maintenance system is in place for the ongoing efficiency of equipment. The majority of production is a continuous process rather than batch, reducing energy for starting and pre-heating processes.

The site operates under a Climate Change agreement and is ESOS compliant. The business is in the process of site assessment for ESOS Phase II.

3) Water Use

All mains water usage on site is sub metered and monitored on a weekly basis. Trade effluent is subject to discharge consents which are monitored by United Utilities. The vast majority of water on site is for bread is for the bread dough manufacture and as part of the proving process, some of which is released as water vapour – but by far the most is retained in the finished product. Typical bread dough contains 40% water and baked bread 35%. 57% of water used on site goes out in product and 16.7% is generated as steam to control moisture in the provers. 74% of the water used is not returned to sewer.

Water levels are strictly controlled by process software. Most plant cleaning is dry cleaning and where water is utilised specific work instructions are in place. All liquid chemical storage includes bunding to prevent loss to ground or surface water and most raw materials are stored within buildings. An accident incident response policy is in place should any accident occur and spill kits are located near liquid ingredient and chemical stores around the site.

The site does not operate any effluent treatment process, nor is there any recycling or reuse of water streams. An improvement condition (IC6) in Table S1.3 has been added into the permit for the operator to submit a written report to the Agency on the feasibility of installing primary effluent treatment and include a review of treatment options available along with their associated benefits. In addition the Operator is to consider the on-site monitoring of the effluent stream prior to disposal as per the relevant BAT Conditions. (BAT 3, 4 and 12, Best Available

Techniques Reference Document and BAT Conclusions document for the food, drink and milk industry dated December 2019).

4) Storage and Containment

The site has a monitoring program to review and inspect the containment. All bunding is visually inspected monthly and prior to any deliveries. A technical inspection is also performed by a competent person annually. Inspections include the assessment of cracking, subsidence, leaks, dampness, degradation of painted surfaces, presence of liquids and rubbish and checking for labels and identification. The application does not includes an inventory of all storage vessels and the secondary containment and surfacing at each. There are some instances of the bund capacity or integrity being unproven and the integrity of the storage tanks on site remains uncertain, so the permit will contain an improvement condition (IC1) requiring the operator to review all primary and secondary containment. The report shall also include confirmation of age, condition, anticipated future operational life, filling and empting arrangements, venting, overfill protection (such as level control and alarms), together with details of containment measures. The report shall determine if the tanks and containment measures are fit for purpose, having regard for the relevant guidance (CIRIA Containment systems for the prevention of pollution (C736) - Secondary, tertiary and other measures for industrial and commercial premises) or, where this is not the case, provide a schedule of works for proposed improvements or tank decommission with timescales for completion.

5) Site Surfacing and Drainage

The applicant has reported that the majority of the operational area and associated chemical/fuel storage areas located in northern part of site are concreted. However, a number of defects have been reported associated with differential settlement and cracking of the concrete slabs. The applicant has stated that these repairs have been built into the CAPEX programme for 2020/21 and 2021/22. Whilst the applicant has reported defects associated with the concrete surfacing no further information has been provided on inspection / maintenance procedures in place for relevant pollution prevention measures.

Given improvements are required IC2 also covers repairs and consideration of replacing grassed surfaces within the operational areas with concrete that may be at risk of pollution from the activities on site to ensure soil and groundwater are protected.

The applicant has also stated that a contractor has been appointed to undertake a CCTV survey of the drains but provides no date for this survey. IC3 requires the Operator to undertake a CCTV survey of sub-surface drainage systems within the installation boundary and provide a structural report to establish the integrity of the

systems and demonstrate that the risk of fugitive emissions from the installation are minimised.

6) Use of Refrigerants

The site has process cooling and chiller plant which is used in the bread manufacture process. The equipment is serviced and maintained by certified contractors. All chiller and cooling units are charged with a range of F-gases and are managed in accordance with the requirements of the F-gas regulations. The applications states that the units and/or refrigerants will be replaced on a rolling basis, selecting a medium with a low GWP.

7) Change in permit activity

The original application was submitted to add a Section 6.8 Part A(1) (d)(ii) activity. During the determination it was noted that due to the proportion of raw animal product used in the production of certain baked goods a Section S6.8 Part A(1)(d)(ii)(bb) activity is more appropriate. The change in activity reference has no impact on the risk the site poses and the conclusions of our determination remain the same.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made. The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The comments and our responses are summarised in the <u>consultation responses</u> section.

The application was publicised on the GOV.UK website. We consulted the following organisations:

- Local Planning Authority, Cheshire West and Chester
- Environmental Health, Cheshire West and Chester
- Health and Safety Executive
- Public Health England
- Department for Public Health, Cheshire West and Chester
- Natural England (for information only)
- Food Standards Agency
- United Utilities Plc

The comments and our responses are summarised in the <u>consultation responses</u> section.

Operator

We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal Operator for environmental permits.

The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation'.

The extent of the facility defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit. The Operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.

A plan is included in the permit and the Operator is required to carry on the permitted activities within the site boundary.

The site

The operator has provided a plan which we consider to be satisfactory. The plan is included in the permit.

Site condition report

The Operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations

identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have not consulted Natural England.

The decision was taken in accordance with our guidance.

Environmental risk

We have reviewed the Operator's assessment of the environmental risk from the facility.

The Operator's risk assessment is satisfactory.

The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment all emissions may be screened out as environmentally insignificant.

Climate change adaptation

We have assessed the climate change adaptation risk assessment.

We consider the climate change adaptation risk assessment is satisfactory.

We have decided to include a condition in the permit requiring the Operator to review and update their climate change risk assessment over the life of the permit.

General operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes;

- Integrated Pollution Prevention and Control Reference Document on Best Available Techniques Reference Document; and
- BAT Conclusions document for the food, drink and milk industry dated December 2019

We consider them to represent appropriate techniques for the facility. The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Application of Best Available Techniques

The applicant submitted a review of the BAT conclusions within the BAT Reference Document on Best Available Techniques (BREF) in the Food, Drink and Milk Industries (December 2019) and their applicability to the installation. The BAT conclusions applicable to this variation have been addressed as summarised in Appendix 1. We have reviewed the key measures proposed by the Operator for this application and assessed them against the relevant BAT requirements. The new (but existing) activity introduced by this variation is required to comply with all relevant BAT conclusions, where the activity is currently not compliant improvement conditions IC6 to IC10 have been included in the permit.

Odour management

We have reviewed the odour management plan in accordance with our guidance on odour management.

We consider that the odour management plan is satisfactory and we approve this plan.

We have approved the odour management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from operations on site or if circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit'.

The plan has been incorporated into the operating techniques \$1.2.

Noise management

We have reviewed the noise management plan in accordance with our guidance on noise assessment and control. We consider that the noise management plan is satisfactory and we approve this plan.

We have approved the noise and vibration management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from operations on site or if circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit'.

The plan has been incorporated into the operating techniques S1.2.

Improvement programme

Based on the information on the application, we consider that we need to include an improvement programme.

Improvement conditions (IC) 1-5 focus on the containment and drainage on site. Under these IC the Operator is required to review the adequacy of existing bunds and containment, review existing pollution prevention measures, undertake CCTV of the sub surface drainage, produce a fire water management plan and install closure valves on the interceptors to prevent pollution of the surface water systems.

Improvement condition IC6 has been included to ensure compliance against BAT conclusions within the BAT Reference Document on Best Available Techniques (BREF) in the Food, Drink and Milk Industries (December 2019). See key issues section above.

Improvement condition IC7 requires the Operator to submit a site activity plan detailing the location of all hazardous substances used at the site.

Emission Limits

We have decided that emission limits are not required in the permit. The Operator's assessment indicated that emissions are insignificant at the relevant sensitive receptors.

Management System

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

The Operator is implementing an Environmental Management System (EMS) in accordance with ISO14001:2015. The Operator is committed to implementation of

the EMS by 4th December 2023. Until then the site continues to operate under its own EMS. This includes sections on environmental policy, equipment maintenance and contingency planning, control of spillages, fire prevention measures, emergency procedures, accidents, complaints procedure and internal and external auditing.

The applicant recognises that the requirements of the EPR permit will need to be built into their EMS, the permit will include an improvement condition for the Operator to address any EMS requirements associated with compliance with the EPR Permit.

The decision was taken in accordance with the guidance on Operator competence and how to develop a management system for environmental permits.

Previous performance

We have assessed operator competence. There is no known reason to consider the applicant will not comply with the permit conditions.

We have checked our systems to ensure that all relevant convictions have been declared.

No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.

Financial competence

There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.

Growth duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.

Paragraph 1.3 of the guidance says:

"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators

should have regard to, alongside the delivery of the protections set out in the relevant legislation."

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate Operators because the standards applied to the Operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation Responses

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section:

Response received from Public Health England.

Brief summary of issues raised: Based on the information contained in the application supplied to PHE, Public Health England has no significant concerns regarding the risk to the health of the local population from the installation.

Summary of actions taken: None required.

Response received from: Cheshire West and Chester - Planning Enforcement West.

Brief summary of issues raised: Confirmed their records do not show that there has been any Planning enforcement action on this site.

Summary of actions taken: None required.

No responses have been received from:

- Environmental Health, Cheshire West and Chester
- Health and Safety Executive
- Food Standards Agency
- United Utilities Plc