

Permitting decisions

Bespoke permit

We have decided to grant the permit for Hull B Generation Plant operated by VP Flexgen Limited.

The permit number is EPR/HP3400PF.

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 decision checklist to show how all relevant factors have been taken in to account.

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

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

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

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Key issues of the decision

Emissions to Air

Use of Air Dispersion Modelling

For combustion applications of this type, we normally require the Applicant to submit a full air dispersion model as part of their application. Air dispersion modelling enables the process contribution (PC) to be predicted at any environmental receptor that might be impacted by the plant.

Once short-term and long-term PCs have been calculated in this way, they are compared with Environmental Standards (ES).

Where an Ambient Air Directive (AAD) Limit Value exists, the relevant standard is the AAD Limit Value. Where an AAD Limit Value does not exist, AAD target values, UK Air Quality Strategy (AQS) Objectives or Environmental Assessment Levels (EALs) are used. Our web guide sets out EALs which have been derived to provide a similar level of protection to Human Health and the Environment as the AAD limit values, AAD target and AQS objectives.

AAD target values, AQS objectives and EALs do not have the same legal status as AAD limit values, and there is no explicit requirement to impose stricter conditions than BAT in order to comply with them. However, they are a standard for harm and any significant contribution to a breach is likely to be unacceptable.

PCs are considered Insignificant if:

- the long-term PC is less than 1% of the relevant ES; and
- the **short-term** PC is less than **10%** of the relevant ES.

The long term 1% PC insignificance threshold is based on the judgements that:

- It is unlikely that an emission at this level will make a significant contribution to air quality;
- The threshold provides a substantial safety margin to protect health and the environment.

The **short term** 10% PC insignificance threshold is based on the judgements that:

- spatial and temporal conditions mean that short term process contributions are transient and limited in comparison with long term process contributions;
- the threshold provides a substantial safety margin to protect health and the environment.

Where an emission is screened out in this way, we would normally consider that the Applicant's proposals for the prevention and control of the emission to be Best Available Technique (BAT). That is because if the impact of the emission is already insignificant, it follows that any further reduction in this emission will also be insignificant.

However, where an emission cannot be screened out as insignificant, it does not mean it will necessarily be significant.

For those pollutants which do not screen out as insignificant, we determine whether exceedences of the relevant ES are likely. This is done through detailed audit and review of the Applicant's air dispersion modelling taking background concentrations and modelling uncertainties into account. Where an exceedance of an AAD limit value is identified, we may require the Applicant to go beyond what would normally be considered BAT for the Installation or we may refuse the application if the applicant is unable to provide suitable proposals. Whether or not exceedences are considered likely, the application is subject to the requirement to operate in accordance with BAT.

This is not the end of the risk assessment, because we also take into account local factors (for example, particularly sensitive receptors nearby such as a Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) or Special Protection Areas (SPA)). These additional factors may also lead us to include more stringent conditions than BAT.

If, as a result of reviewing of the risk assessment and taking account of any additional techniques that could be applied to limit emissions, we consider that emissions **would cause significant pollution**, we would refuse the Application.

The key pollutants of concern from the combustion of natural gas in plants of this type are nitrogen oxides (NO_x) and carbon monoxide (CO). The Applicant has therefore focussed their assessment on the installation's potential NOx emissions to air and compared these against the relevant ES, and the potential impact upon local conservation and habitat sites and human health. These assessments predict the potential effects on local air quality from the Installation's stack emissions using the ADMS 5.2 dispersion model, which is a commonly used computer model for regulatory dispersion modelling. The model used five years of meteorological data collected from the weather station at Leconfield between 2014 and 2018. This station was considered representative of the meteorological conditions experienced at the proposed location. The impact of the terrain and buildings surrounding the site upon plume dispersion was considered in the dispersion modelling.

The Applicant has stated that the plant with operate for up to 1,500 hours per year. When required to operate the plant may operate for up to eight hours continuously at any time of the day or night. To ensure that the worst-case 1-hour mean concentrations are predicted in the modelling year, the plant has been assumed to operate continuously for every day of the year, which equates to 8670 hours operation annually. To allow for a maximum of 1500 hours operation per year, the predicted annual mean concentration have been adjusted using factor of 1500/8760.

Human Receptors

Several nearby human receptors were identified by the Applicant and the short term and long term impact was predicted at each location. The following table shows the maximum impact at a receptor (therefore impacts at all other receptors are predicted to lower):

Background	<u>PC</u>		PEC ^{Note 1}		
<u>µg/m³</u>	<u>µg/m³</u> <u>% of EAL</u> ^{Note 2}		µg/m ³	% of EAL Note 2	
28.5	1.2	3	29.7	74	
Note 1: The PEC is the sum of the PC plus the background concentration Note 2: ES for long-term NO ₂ is 40 μ g/m ³					

Table 2 Maximum short-term Predicted NO2 concentrations at human receptors

Background	<u>PC</u>		PEC ^{Note 1}		
<u>µg/m³</u>	μg/m ³ % of EAL ^{Note 2}		µg/m³	% of EAL Note 2	
57	34.1 15		91.1	46	
Note 1: The PEC is the sum of the process contribution plus the background concentration. Note 2: Air quality standard for short-term NO ₂ is 200 μ g/m ³					

Table 3 Maximum carbon monoxide (CO) concentrations at human receptors

Background	<u>1-hour mean</u> <u>PC</u>	<u>1-hour mean</u> <u>PEC</u>	8-hour mean PC	8-hour mean PEC	
µg/m ³	µg/m³	<u>µg/m³</u>	µg/m ³	μg/m ³	
726	1901 (6% of EAL ^{Note 1})	2627 (9% of EAL ^{Note 1})	1797 (18% of EAL Note 2)	2523 (25% of EAL ^{Note 2})	
Note 1: 1 –hour CO EAL = 30,000 μg/m ³ Note 2: 8-hour CO EAL = 10,000 μg/m ³					

The assessment shows that the maximum NO_2 long-term and short-term PCs will not lead to the exceedance of the human health ES. Also emissions of CO will also not exceed the relevant human health ES.

The way in which the Applicant used dispersion models, its selection of input data, use of background data and the assumptions it made have been reviewed by the Environment Agency's modelling specialists to establish the robustness of the Applicant's air impact assessment. Our review of the Applicant's assessment leads us to agree with the Applicant's conclusions.

Ecological Receptors

The key emission from the proposed installation in terms of a possible impact on ecological receptors are emissions to air from the combustion of natural gas. The key pollutant from an ecological perspective from this combustion process is NOx. This pollutant has the potential to cause acidification and/or nutrient enrichment at ecological sites. The Applicant has carried out an assessment of the impact of NOx emissions from the process. The assessment has considered the impact of ground level NOx, nutrient nitrogen deposition and acid deposition at the nearby ecological receptors.

The Applicant has used air dispersion modelling (ADMS 5.2) to predict the impact at the ecological receptors. Relevant critical loads and levels for each relevant habitat type within the habitat site have been derived from the Air Pollution Information System (APIS) database.

Assessment of Habitat sites

The following Habitats (i.e. SAC, SPA, Ramsar and SSSI) sites are located within 10Km of the Installation:

• Humber Estuary SAC, SPA, Ramsar and SSSI.

The Applicant has assessed the impact at 3 discrete receptor locations at the habitat site. The assessment predicted PCs for ground level NOx and nutrient nitrogen deposition. The following table shows the results of the assessment:

Receptor	Background	<u>PC</u>		PEC Note 1			
	<u>µg/m³</u>	µg/m³	% of EALNote 2	µg/m ³	% of EAL Note 2		
Humber Estuary 1	-	0.2	<1	-	-		
Humber Estuary 2	28.1	0.4	1.4	28.5	95%		
Humber Estuary 3	-	0.1	<1	-	-		
	Note 1: The PEC is the sum of the process contribution plus the background concentration. Note 2: Critical level for NO _x is 30 µg/m ³						

Table 4: Annual mean NOx Concentrations at Humber Estuary SAC/SPA/Ramsar/SSSI

Table 5: 24-hour Mean NOx Concentrations at Humber Estuary SAC/SPA/Ramsar/SSSI

Receptor	Background	<u>PC</u>		PEC Note 1	
	<u>µg/m³*</u>	µg/m³	% of EALNote 2	µg/m ³	% of EAL Note 2
Humber Estuary 1	-	17.0	23	-	-
Humber Estuary 2	-	20.8	28	-	-
Humber	-	8.0	11	-	-

Estuary 3						
Note 1: The PE	Note 1: The PEC is the sum of the process contribution plus the background concentration.					

Note 2: Critical level for NO_x is 75 $\mu g/m^3$

*In line with permitting guidance there is no requirement to consider short-term effects in-combination with background (PEC).

Table 5 Annual Mean Nutrient Nitrogen Deposition at Humber Estuary SAC/SPA/Ramsar/SSSI

Receptor	Background	<u>PC</u>		PEC Note 1		
	(kg/ha/yr)	(kg/ha/yr)	% of EALNote 2	(kg/ha/yr)	% of EAL Note 2	
Humber Estuary 1	-	0.017	<1	-	-	
Humber Estuary 2	-	0.043	<1	-	-	
Humber Estuary 3	-	0.008	<1	-	-	
	Note 1: The PEC is the sum of the process contribution plus the background concentration. Note 2: Critical Load for Nutrient Nitrogen Deposition 8 – 30 kg/ha/yr					

Table 6 Annual Mean Acid Deposition at Humber Estuary SAC/SPA/Ramsar/SSSI

Receptor	Background	<u>PC</u>		PEC Note 1		
	(kg/ha/yr)	(kg/ha/yr)	% of EALNote 2	(kg/ha/yr)	% of EAL Note 2	
Humber Estuary 1	-	0.001	<1	-	-	
Humber Estuary 2	-	0.003	<1	-	-	
Humber Estuary 3	-	0.001	<1	-	-	
Note 1: The PE	Note 1: The PEC is the sum of the process contribution plus the background concentration.					

Note 2: Critical Load for Acid Deposition Clmax N (keq/ha/yr) = 0.643

The Applicant's assessment shows that for nutrient nitrogen deposition and acid deposition the PCs are <1% of the critical load. In line with our guidance (Operational instruction 66_12) the PC can be considered insignificant and we can therefore conclude 'no likely significant effect' alone or in-combination.

For 24-hour mean NOx PC the Applicant's assessment predicted a worst-case PC of 28% of the NOx critical level. In line with our guidance (Operation instruction 66_12) there is no requirement to consider short-term effects in combination with the background. The Applicant has stated that they have used a highly conservative approach to the calculation of the 24-hour mean PC and this has resulted in a greatly overestimated impact. The Applicant stated that the peaking plant will operate for a maximum of eight-hours in any 24 hour period. They have calculated the PC assuming the eight highest 1-hour concentrations

predicted during the five years of meteorological data modelled, and these 1 –hour periods will occur for the 8 hours of operation in any one day and have then averaged this over a 24-hour period. This is a very conservative assessment as it is likely that the operation of the plant could coincide with the eight worst hours of meteorological conditions from a five- year period in a given 24-hours. We agree that the assessment is very conservative and our checks indicate that the PC is likely to be significantly less than predicted and an exceedance of the 24 hour mean critical level is unlikely.

For annual mean NOx PC the Applicant's conservative assessment predicted a PC of 1.4% of the annual mean critical level. Our check modelling and sensitivity analysis indicate that the PC is likely to be less than predicted, and is likely to be at or below the 1% insignificance threshold. We are therefore satisfied that the PC is likely to be insignificant and therefore we have concluded 'no likely significant effect' alone or incombination.

A Stage 1 and Stage 2 Habitat Regulations Assessment (HRA); and an Appendix 4 CRoW Assessment were completed and sent to Natural England for consultation. The HRA concluded the emissions would have 'no likely significant effect' on the integrity of the Humber Estuary SAC/SPA/Ramsar alone or in combination with other plans and projects. The Appendix 4 CRoW Assessment concluded that the operations are not likely to damage the special interest features of the SSSI. Natural England agreed with our conclusions. The assessments can be found on the public register.

Assessment of other conservation sites

There are a number of non-statutory local wildlife and conservation sites within 2Km of the proposed Installation:

Meadow Area 4 Local Wildlife Site Former Withersea Railway Local Wildlife Site Land East of Falkland Road Local Wildlife Site

Conservation sites are protected in law by legislation. The Habitats Directive provides the highest level of protection for SACs and SPAs, domestic legislation provides a lower but important level of protection for SSSIs. Finally the Environment Act provides more generalised protection for flora and fauna rather than for specifically named conservation designations. It is under the Environment Act that we assess other sites (such as local wildlife sites) which prevents us from permitting something that will result in significant pollution; and which offers levels of protection proportionate with other European and national legislation. However, it should not be assumed that because levels of protection are less stringent for these other sites that they are not of considerable importance. Local sites link and support EU and national nature conservation sites together and hence help to maintain the UK's biodiversity resilience.

For SACs SPAs, Ramsars and SSSIs we consider the contribution PC and the background levels in making an assessment of impact. In assessing these other sites under the Environment Act we look at the impact from the Installation alone in order to determine whether it would cause significant pollution. This is a proportionate approach, in line with the levels of protection offered by the conservation legislation to protect these other sites (which are generally more numerous than Natura 2000 or SSSIs) whilst ensuring that we do not restrict development.

Critical levels and loads are set to protect the most vulnerable habitat types. Thresholds change in accordance with the levels of protection afforded by the legislation. Therefore the thresholds for SAC, SPA and SSSI features are more stringent than those for other nature conservation sites.

Therefore we would generally conclude that the Installation is not causing significant pollution at these other sites if the PC is less than the relevant critical level or critical load, provided that the Applicant is using BAT to control emissions.

The Applicant assessed the impact at all of the non-statutory sites listed above in their application. The results of the assessment showed that PCs of nutrient deposition and acid deposition at all the sites are below the relevant critical loads and will therefore not cause significant pollution. With regards to NOx, PCs are predicted to be below the annual mean critical level for all sites and below the 24-hour mean critical level for all sites apart from Meadow 4 Area 4 Local Wildlife Site. The Applicant's assessment predicts that the 24-hour mean NOx PC at the closest part of the local wildlife to the proposed installation exceeds the critical level, however the air dispersion modelling shows that the exceedance of the daily critical level was only predicted to occur for up to a maximum of three days across five years and as discussed above the

modelling assessment is very precautionary. The Applicant has therefore concluded that the short-term impact of emissions on the LWS will not be significant. As discussed above our air quality specialists have audited the Applicant's assessment, including check modelling, we agree that the Applicant's assessment is very conservative and our check modelling indicates that an exceedance of the critical level is unlikely. We are therefore satisfied that any impacts on the nearby LWS are not likely to be significant.

Emissions of Noise

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise noise and vibration and to prevent pollution from noise and vibration outside the site.

The application contained a noise impact assessment which identified local noise-sensitive receptors, potential sources of noise at the proposed plant and noise attenuation measures. Measurements were taken of the prevailing ambient noise levels to produce a baseline noise survey and an assessment was carried out in accordance with BS 4142:2014 to compare the predicted plant rating noise levels with the established background levels.

We have assessed the Applicant's proposals and based on our check modelling and sensitivity analysis we agree with the Applicant's BS 4142:2014 conclusions that noise impact at all receptors is likely to be low.

BAT assessment

Selection of combustion technique

The Applicant carried out a review of the following candidate combustion technologies in order to justify why the chosen option was BAT:

- Combined cycle gas turbines (CCGT), Open cycle gas turbines (OCGT) and Aero derivative gas turbine
- Diesel engines
- Gas engines

The CCGT and open-cycle options have been discounted because it does not allow rapid start-up, which is an important requirement for peaking plants as they must respond quickly in times of peak demand on the grid. Aero derivative gas turbines have been discounted because this technology does not offer the highest levels of energy efficiency as compared to gas engines. The use of diesel compression engines has been discounted based on emissions as they would be higher in terms of sulphur dioxide, particulates and NOx as compared to the other technologies which would utilise natural gas a fuel which is considered a 'cleaner' fuel than diesel in terms of emissions following combustion. Also using diesel as a fuel would require bulk storage on site which increases the risk of fugitive pollution as compared to natural gas

The Applicant therefore considered gas engines fuelled by natural gas as the best option and therefore BAT for their proposal. They have concluded that whilst they recognise that other modes of operation with alternative technologies can provide energy efficiency benefits, such as CCGT, the alternatives cannot provide the necessary flexibility required for the peaking plant, where rapid start up times are necessary to ensure security of energy supply. Also the use of natural gas over diesel means lower emissions and higher thermal efficiency.

We agree that the use of gas engines can be considered BAT for peaking plant, however this is for plants that are limited to no more than 1,500 hours per year.

Choice of Fuel

The Applicant has chosen mains gas as this represents the most reliable and least polluting fuel available for use at the site. By using mains gas, there will be negligible emissions of sulphur and particulates and by operating in a lean-burn mode, the quantities of NOx emitted comply with the Medium Combustion Plant Directive for new gas fuelled engines.

The choice of mains gas only (not dual fuel) also minimises the need to store significant quantities of raw materials on-site. We are satisfied that mains supply natural gas represents BAT in terms of fuel choice for this Installation

Primary Emissions Controls

The engines operate using the principle of lean-burn combustion to offer high rate of efficiency and a primary method of minimising exhaust emissions to air.

Assessment against BAT standards for the energy balancing market

The Applicant has compared the chosen technology against the Department of Energy and Climate Change (DECC) draft report Developing Best Available Techniques for Combustion Plants operating in the balancing market, dated June 2016. We are satisfied the spark ignition engines exceed the minimum efficiency for electrical generation and the NOx emissions will achieve 95 mg/m³ in line with the requirements of the Medium Combustion Plant Directive. Although we would not consider this type of plant BAT for operation of over 1,500 hours as a rolling average, as this site will operate as peaking plant below this threshold we are satisfied that it is appropriate technology for this mode of operation.

Stack Height

As part of the air quality assessment the Applicant carried out a stack height analysis to justify their chosen stack height of 9m. The assessment concluded that increasing the stack height above 9m is unlikely to lead to a significant improvement in the impact at the closest sensitive receptor locations. We agree with this conclusion.

Other issues

Site Management

The Applicant has stated that the facility will be operated by remote instruction and manned for inspection and maintenance purposes once a week. The site will be monitored via feedback from an automatic control system (SCADA) and via visual monitoring by a CCTV camera system installed on site. The CCTV is monitored 24/7 by a third party contractor who will be instructed to report any unusual events (such as flue smoke, fire, liquid spills) as well as security issues. The SCADA system will use alarms to alert on-call engineers via mobile devices in real time in the event of any abnormal operating parameters. A written management system will be in place.

Fugitive emissions to water and groundwater

The potential pollutants to surface water and land will be from lube oil or coolant spillages. The Applicant stated that the lube oil and coolant will be stored within a sealed system inside each engine unit, the engine containers are internally bunded therefore if an engine was to fail any oil/lubricant released would remain within the container. This event would trigger an alarm and an engineer would be in attendance within four hours. Also fill points will be provided with secondary containment and high level alarms will be fitted to prevent overfilling.

The entire site area is covered by impermeable hard standing and all surface water is directed to the surface water drainage system which passes through an interceptor and silt trap before being pumped off site. This system can be isolated in event of an emergency (e.g fire) to prevent contaminated runoff (e.g. firewater) leaving site. Any contaminated runoff isolated will then be tankered off site for disposal by a third party. The interceptor and silt traps will be inspected on a regular basis.

Based upon the information in the application we are satisfied that appropriate measures will be in place to prevent and /or minimise fugitive emissions.

Energy Efficiency Directive (EED)

Article 14 of the EED requires certain types of combustion installations to carry out a cost benefit analysis (CBA) for cogeneration or supplying a district heating or cooling network. In the EED certain installations are exempt from the requirements for CBA, including the following exemption:

'those peak load and back-up electricity generating installations which are planned to operate under 1500 operating hours per year as a rolling average over a period of five years, based on verification established by the member states ensuring that this exemption criteria is met'

Therefore a CBA is not required for this Installation as it is limited by the permit to operate no more than 1500 operating hours per year as a rolling average.

Improvement conditions.

There is insufficient evidence regarding the effects of enhanced lean burn (ELB) on methane slip and formaldehyde production by oxidation. Improvement Conditions IC1 and IC2 have been included to establish these emission levels under ELB, compare them with the manufacturer's specifications and appropriate benchmark levels and undertake an assessment of the impacts of formaldehyde in line with our H1 guidance or equivalent methodology. These improvement conditions are applied to all new installations using gas engines to serve the balancing market on the electricity Grid.

IC3 has been included to ensure the Operator reports the outcome of the commissioning of the installation to the Environment Agency. This is to ensure that the Operator demonstrates that the installation will operate in line with the operating techniques specified in the permit application.

Emission limits and monitoring.

'Emission limit values' (ELVs) have been set for the following substances.

• Oxides of Nitrogen (NO_x and NO₂ expressed as NO₂).

These limits have been imposed in line with the requirements of the Medium Combustion Plant Directive (MCPD) for this type of plant. The limit is set at 95ug/m³ NOx which is the limit set in the directive for new gas engines using natural gas as a fuel. The Applicant modelled emissions based on the gas engines operating at this limit as a worst case. The limit is set in table S3.1 of the permit.

It is considered that the ELVs described above will ensure that significant pollution of the environment is prevented and a high level of protection for the environment secured.

We have decided that monitoring should be carried out for the parameters listed in the permit (Table S3.1), using the methods detailed and to the frequencies specified. These monitoring requirements have been imposed in order to meet the requirement of the Medium Combustion Plant Directive (MCPD). Based on the information in the application we are satisfied that the Applicant's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.

Decision checklist

Aspect considered	Decision			
Receipt of application				
Confidential information	A claim for commercial or industrial confidentiality has not been made.			
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.			
Consultation				
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.			
	The application was publicised on the GOV.UK website and we consulted with:			
	Planning department, Environmental Health & Director of Public Health East Riding Authority			
	Planning department, Environmental Health & Director of Public Health Hull City Council			
	Planning department, Environmental Health & Director of Public Health North Lincolnshire			
	National Grid			
	Health and Safety Executive			
	Public Health England			
	The comments and our responses are summarised in the <u>consultation</u> <u>section</u> .			
Operator				
Control of the facility	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 facility				
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 RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2			

Aspect considered	Decision
	'Interpretation of Schedule 1'.
	The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.
The site	
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.
Site condition report	The Applicant 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.
Biodiversity, heritage, landscape and nature	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.
conservation	Humber estuary SAC, SPA, Ramsar and SSSI
	Meadow 4 LWS
	Former Withernsea Railway LWS
	Land East of Falkland Road LWS
	We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.
	We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.
	As detailed in the 'Key Issues' section we have completed a Stage 1 and Stage HRA and an Appendix 4 CRoW assessment which were sent Natural England for consultation. Natural England agreed with our conclusions.
Environmental risk assess	sment
Environmental risk	We have reviewed the Applicant's assessment of the environmental risk from the facility.
	The operator's risk assessment is satisfactory.
	See 'Key issues' above for further information.
Operating techniques	
General operating techniques	We have reviewed the techniques used by the Operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.
	The operating techniques that the Applicant must use are specified in table

Aspect considered	Decision
	S1.2 in the environmental permit.
Permit conditions	
Improvement programme	Based on the information in the application, we consider that we need to impose an improvement programme.
	IC1, IC2 and IC3 in table S1.3 have been included. See 'Key Issues' above for further information.
Emission limits	See 'Key issues' section.
Monitoring	See 'Key issues' section.
Reporting	We have specified reporting in the permit.
	Reporting frequencies are based on annual requirement for monitoring and that the site operates at 1,500 hours per year as a rolling average. The result will allow us to compare air emissions and operating hours specified in the air quality modelling to ensure they reflect those achieved in practice are in line with MCPD.
Operator competence	
Management system	There is no known 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.
Relevant convictions	The Case Management System and National Enforcement Database have been checked 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	
Section 108 Deregulation Act 2015 – 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

Aspect considered	Decision
	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

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

They have no significant concerns regarding the risk to health of the local population from the installation. However they have asked that the regulator should be satisfied that there is no impact from emissions to air at the closest receptor, flat above Mr Chui Café which is located 177m north of the site, as the receptor was not included in the quality assessment.

Summary of actions taken or show how this has been covered

We have considered the above receptor location in our audit and check modelling assessment and we are satisfied that there will be no exceedances of an ES at this location.

Response received from

Hull City Council – Public Protection and Public Health Dept.

Brief summary of issues raised

A comment related to the noise impact. It is noted that in the noise impact assessment, residential receptors on Tower House Lane in the HU12 8EE postcode area have not been included for consideration. It is also unclear from the assessment if the noise rating levels calculated are based on the generators with or without inclusion of the acoustic mitigation proposed. If the levels have been calculated based on the inclusion of mitigation with no additional measures proposed, they there is the potential for background noise creep at a number of receptor locations.

Summary of actions taken or show how this has been covered

Our audit and check modelling of the Applicant's noise assessment concluded that specific noise levels at the Tower House Lane receptors would in all likelihood be below background levels, therefore we anticipate a low impact.

Our assessment indicates that any noise sources will add to background creep but the incremental amount is expected to be low in what is already a heavily industrialised area.