

Permitting decisions

Bespoke permit

We have decided to grant the permit for Wilton Energy Centre operated by Engie Services Limited.

The permit number is EPR/MP3131RW/A001.

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
- shows how we have considered the consultation responses.

Unless the decision document specifies otherwise we have accepted the Operator'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

The key issues section covers the following topics:

- 1. Best Available Techniques (BAT)
 - a. Combustion Plant
 - b. Choice of Fuel
 - c. Abatement
 - d. Water Pre-Treatment Plant
 - e. BAT Standards and Guidance
 - f. Emissions Limits
- 2. Air Quality
- 3. Discharge to Surface Water
- 4. Chemicals Storage
- 5. Improvement Conditions

1. Best Available Techniques (BAT)

Huntsman Polyurethanes (UK) Limited intends to replace their current working methods of steam importation and abatement via thermal oxidiser, with three gas fuelled boiler units which can provide an equivalent standard of vent gas combustion and steam supply. This installation will be operated by Engie Services Limited (referred to as the Operator).

The proposed approach is considered to sit higher up the BAT hierarchy as the existing thermal oxidiser does not have the ability for heat or steam recovery and requires a significant amount of additional gas for the destruction of chemical vent gases. The three boiler units will be able to carry out the same abatement function as the thermal oxidiser, whilst enabling onsite steam production and heat recovery. This change in technology will therefore increase the site's energy efficiency. In addition the boiler plant is designed to achieve lower nitrogen dioxide emissions than the existing thermal oxidiser.

We have reviewed the proposal against the requirement of our BAT guidance and we are satisfied that the Operator's proposals meet BAT.

a. Combustion Plant

The Operator carried out a review of the following candidate combustion technologies and made an assessment of the technology in order to determine which technology can be considered to be BAT.

- Base-case / supply of steam from a third party (Sembcorp) and treatment of vent gases via a thermal
 oxidiser
- · Steam turbine utilising low pressure steam.
- Gas engines.
- · Gas turbines.
- Boilers.
- Steam compressors.

The Operator carried out a further review of the boiler technology in relation to the following configuration options to determine BAT plant design:

- Option 1 Base case of two 20 tonne steam raising boilers (SRB) including provision of boiler feed water (BFW).
- Option 2 Two 20 tonne SRB excluding provision of BFW.
- Option 3 SRB and a steam compressor including provision of BFW.
- Option 4 SRB and steam compressor excluding provision of BFW.

The Operator determined that the combination of boilers and steam compressors including the provision of BFW was BAT. This is based on the following benefits of both technologies:

Boiler Technology

- Boilers are readily available.
- Onsite boilers will allow a more reliable source of steam than the existing method of importation.
- They have the ability to fire on multiple fuels including vent gases, so will allow the abatement of chemical vent gases previously abated via a thermal oxidiser, which had no steam or heat recovery. This reduces the site's global warming emissions and improves energy efficiency.
- The boilers are 94% efficient and this only reduces by up to <0.3% depending on the vent gas composition, therefore the abatement of vent gas will not impact significantly on the efficiency of the boilers.
- Using vent gases as a supplementary fuel, the burners have the ability to remove volatile organic compounds (VOCs) with an efficiency of >99%.
- The burner technology offers significant carbon savings.

Steam Compression

- The steam technology is capable of delivering the steam loads and pressure required by the Huntsman plant and can additionally provide boiler feed for water process use.
- Steam compression would take the existing low pressure steam and increase this to a higher
 pressure, such that it can offset some of the gas input at the steam boilers. Compression requires
 140 kWh electricity to upgrade one tonne of steam, but this avoids the need to use 980 kWh/tonne of
 gas for on-site generation.
- Low pressure steam could be utilised for feed water heating duties, offering 100% utilisation of energy consumption.
- The water fed to the steam boilers will be of sufficient quality to limit boiler blow down to <1%, which minimises the heat wasted from the boiler plant to minimum practical standards.

We have reviewed the Operator's assessment of methods for producing steam and abating emissions from the Huntsman chemical installation. The Operator has demonstrated that the proposals provide:

- Significant improvements to energy efficiency, global warming potential and the abatement of
 emissions in comparison to other technologies available as outlined in the application.
- A more cost effective solution than buying in steam from an external provider.
- Enhanced site resilience, making the steam source more reliable.

Based on this we are satisfied that the chosen configuration can be considered BAT.

b. Choice of Fuel

Vent Gas

The Operator intends to use vents gases from the Huntsman chemical site to partially supplement fuel supply to the boilers contributing up to 10% of the thermal input. This fuel will be utilised as part of an initiative to replace the onsite thermal oxidiser with a boiler plant in order to improve site energy efficiency as outlined above.

The Operator has outlined that the introduction of vent gases will reduce the efficiency of the boilers combustion process by approximately 0.3%. This reduction is however outweighed by the significant increase in energy efficiency achieved by a move from the thermal oxidiser with no energy recovery to the boiler plant, which raise steam.

We have reviewed the use of vent gas fuels within the boiler and are satisfied they will be appropriately treated during the combustion process and therefore the combination of utilising waste gases for fuel and as an abatement technique can be considered BAT.

Natural Gas

The Operator has chosen to use natural gas as the main fuel for the boilers, which is on the basis that:

- The boilers selected are natural gas fired (or hydrogen-rich vent gas).
- Gas is delivered by pipeline, which means that there is no requirement to store large quantities of
 potentially polluting substances onsite, such as diesel, thus reducing the risk to the environment from
 spills.
- Combustion of natural gas produces low levels of particulates in comparison to diesel.
- It can be effectively mixed with the waste vent gases.

Natural gas has therefore been selected as BAT in terms of fuel choice for this facility.

c. Abatement

Primary Abatement

The Operator has demonstrated that they have sufficient primary emission controls in place. The boiler will utilise:

- Low NO_x burners.
- Flue gas recirculation.
- Common practice measures for controlled combustion including management of temperature and oxygen content.

We have reviewed these proposals in line with the requirements of our guidance, How to Comply – Combustion Activities (EPR 1.01), and are satisfied the proposals represent BAT.

Secondary Abatement

The Operator has demonstrated that the installation of secondary abatement for boilers one, two and three is not justifiable as the air emissions from the plant are calculated and modelled to be insignificant in comparison to the relevant air quality standards. Therefore the relative environmental benefit that could be derived from the reduction in NO_x emissions as a result of secondary abatement is considered to be disproportionate to its cost. As a result the utilisation of the primary abatement techniques above are considered to represent BAT for this site.

Improvement condition 6 has been set in case the Operator is unable to comply with the 200 mg/m 3 NO $_x$ emission limit value, with the intention to bring the installation in line with BAT.

d. Water Pre-Treatment Plant

The Operator carried out a review of water pre-treatment technology for the generation of water to supply the steam raising boilers and made an assessment of the available technologies in order to determine which technology could be considered BAT. Technologies available include; demineralisation and reverse osmosis.

Based on the result of this assessment, the Operator chose reverse osmosis as the water pre-treatment plant technology for the following reasons:

- There is no need to use acids or caustic soda.
- The recovery rate is comparable to other technologies on the market.
- The space requirement is low.
- The capital cost is significantly lower.

Based on the superior efficiency, raw material use and cost benefits we are satisfied that this technology can be considered BAT for water pre-treatment.

e. BAT Standards and Guidance.

The Operator has assessed their activity against the requirements of the combustion and chemical sector guidance.

As this site consists of 3 individual boilers which are each less than $15 MW_{th}$, the site does not fall under Chapter III of the Industrial Emissions Directive and is therefore not considered a large combustion plant.

Medium Combustion Plant Directive (MCPD)

The Operator considered the base case for the proposed plant as solely supplying steam, a scenario for which they suggested the principal best available techniques reference documents (BREF) would be the MCPD, based on the thermal input to the boilers.

They identified that the proposed vent gas fuel would only constitute at total of 10% of the input to the boilers. Whilst the contribution of energy from the vent gas is beneficial, the Operator considers the

weighting does not predicate the principal function of the process, which is to combust fuel to provide high pressure steam.

On this basis they considered the principal standards for this process to be the MCPD.

Chemical BREF

We have reviewed the Operator's assessment of the appropriate standards that apply to this activity.

Even though the Operator's boilers are designed to produce steam, the boilers are also acting as critical abatement serving a chemical installation. The current permit for the chemical installation (EPR/BS8656IX Huntsman Polyurethanes (UK) Limited) requires the abatement of chemical vent gas emissions. Because the proposed boilers will be a Directly Associated Activity and critical infrastructure (abatement) in regards to compliance with permit EPR/BS8656IX, this aspect of the plant carries equal weighting to the production of steam.

The Large Volume Organic Chemical (LVOC) BREF covers chemical facilities that utilise combustion plant to abate waste chemical gases. This guidance refers in multiple places to utilising combustion gases in supporting combustion processes.

In addition the MCPD states that it does not cover the abatement of vent gas: "This directive shall not apply to.....post combustion plants designed to purify the waste gases from industrial process by combustion and which are not operated as independent combustion plants."

Our Decision

We have determined that it is appropriate to apply the BAT and emission standards listed in the LVOC BREF as; the boiler will be acting as a critical abatement infrastructure to the chemical plant, which is an activity covered under the LVOC BREF and also the MCPD states that it does not cover post treatment of waste activities.

f. Emissions Limits

Based on our assessment of the most appropriate standard and guidance for the regulation of this facility we have determined that the most appropriate emissions limits should be those listed in the LVOC BREF. Air emissions – UK table in Annex 1 of the LVOC BREF lists the benchmark release levels for air emissions for a variety of chemical sector processes. As these standards are considered BAT for the chemical processes and the associated abatement systems outlined in this BREF, we are satisfied that these emission limits are appropriate for this site and have been set in table S3.1 of the permit.

2. Air Quality

The Operator's assessment of the impact on air quality is set out in the application. The assessment comprises of:

- Dispersion modelling of emissions to air from the operation of two gas-fired steam boilers
- A study of the impact of emissions on nearby sensitive human and ecological receptors.

Although the proposal consists of three boilers, only two boilers will operate simultaneously and therefore we are satisfied that continuous operation of two boilers 24-hours per day throughout the year represents a worst case scenario. Two of the boilers are equipped to be fired using either natural gas or hydrogen-rich vent gas, and the third stand-by boiler will operate using natural gas only. All three boilers emit through a common windshield.

The dispersion modelling of emissions to air from a single combined flue and their impact on human receptors and conservation sites has been used to predict the potential effects on local air quality from the

installation's stack emissions using the ADMS (v5) dispersion model, which is a commonly used computer model for dispersion modelling.

The air quality assessment report dated June 2016 showing the dispersion modelling for key pollutants NO_x and CO was submitted with the application. The addendum to the main report that provides the results of dispersion modelling of VOCs emissions was submitted in March 2017, as a response to the Not Duly Made letter.

Meteorological data for the modelling comprises five years monitoring between years 2008-2014, using the most representative data from Teeside Meteorological Station. The Operator considered this station as the most suitable source of meteorological data due to its proximity to the facility.

The Operator has modelled the concentration of key pollutants (NO_x, CO and total VOCs) at a number of specified locations within the surrounding area.

The following assessment has been undertaken using the assessment criteria set out in the Environment Agency H1 guidance:

Process Contributions (PC) are considered insignificant if:

- The long-term process contribution is less than 1% of the relevant Environmental Standard (ES); and
- The short-term process contribution is less than 10% of the relevant ES.

The long term 1% process contribution 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% process contribution 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 proposed threshold provides a substantial safety margin to protect health and the environment.

Where an emission is screened out in this way, we consider that the Operator's proposals do not require further assessment as there are no likely significant effects.

Impact on Human Receptors

The Operator's modelling predictions indicate the predicted concentrations of each pollutant at the sensitive human receptor locations as identified in the application (table 3 of the Air Quality Assessment, 16th June 2016 and table 3 of Air Quality Addendum, March 2017).

The Operator has assessed the impact of key pollutants against the assessment criteria set in the Environment Agency H1 guidance in terms of human health. Predicted impacts are summarised in tables 1 and 2 below.

EPR/MP3131RW/A001 Date issued: 31/07/2017

Table 1 – Predicted long term impact to air from NO_x (expressed as NO₂), and VOC (expressed as Benzene) emissions

Pollutant	ES μg/m³	PC μg/m ^{3 (1)}	PC % of ES	
NO ₂	40	0.2	0.6	
Benzene	5	0.01	0.14	
Note 1 – PC is given as the worst case of results at the sensitive human receptors				

<u>Table 2 – Predicted short term impact to air from NO_x (expressed as NO₂), CO and VOC (expressed as Benzene)</u> <u>emissions</u>

Pollutant	ES μg/m³	PC μg/m ^{3 (1)}	PC % of ES
NO ₂	200	1.9	0.9
СО	10,000	3.4	<0.1
Benzene	195	0.26	0.14

Note 1 – PC is given as the worst case of results at the sensitive human receptors

The results of the Operator's Air Quality Assessments show that emissions of all key pollutants (NO_x, CO and VOCs) can be considered insignificant, and therefore there is no need for further assessment.

To verify the results of the Operator's modelling assessment our Air Quality Monitoring and Assessment Unit carried out modelling checks. Based on those checks we are satisfied with the Operator's modelling approach and conclusions.

Impact on Nature Conservation Sites

There are Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites within the screening distance of 10 km of the installation but our search has confirmed that there are no Sites of Special Scientific Interest (SSSI) within the screening distance of 2 km of the installation. Our search has also identified non-statutory sites within 2 km of the installation.

The Operator's modelling predictions indicate the predicted concentrations of each pollutant at the ecological receptors as identified in the application (table 4 of Air Quality Assessment dated 16th June 2016).

The Operator has assessed the dispersion of important pollutants against critical level criteria for the protection of vegetation and ecosystems which is summarised in table 3. The values shown represent the worst for any of the receptors for each pollutant.

Table 3 Results of assessment of emissions to air from NO_x

Pollutant	Averaging Time	Percentile	Sensitive Habitat	PC µg/m3	AQAL (µg/m3)	PC/ AQAL (%)
			Teesmouth and Cleveland Coast SPA &			
NO _x	1 hr	99.79	RAMSAR	0.9	75	1.2
NOx	1 Year	Annual Mean	Teesmouth and Cleveland Coast SPA & RAMSAR	0.1	30	0.3
NOx	1 hr	99.79	North York Moors SPA	0.2	75	0.3
NOx	1 Year	Annual Mean	North York Moors SPA	0.1	30	0.3

The Operator has assessed the critical loads for nitrogen and acid deposition against critical load criteria for sites as obtained from the UK Air Pollution Information System, which is summarised in tables 4 and 5. The values shown represent the worst for any of the receptors for each parameter.

Table 4 Results of assessment of emissions to air from Nutrient Nitrogen Deposition

Pollutant	Averaging Time	Percentile	Sensitive Habitat	PC (kgN/ha/yr)	AQAL (kgN/ha/yr)	PC/ AQAL (%)
Nutrient nitrogen deposition	1 year	Annual Mean	Teesmouth and Cleveland Coast SPA & RAMSAR	0.01	5	0.3
Nutrient nitrogen deposition	1 year	Annual Mean	North York Moors SPA	<0.01	5	<0.01

Table 5 Results of assessment of emissions to air from Acid Nitrogen Deposition

Pollutant	Averaging Time	Percentile	Sensitive Habitat	PC (keq/ha/yr)	AQAL (keq/ha/yr	PC/ AQAL (%)
Acid nitrogen deposition	1 year	Annual Mean	Teesmouth and Cleveland Coast SPA & RAMSAR	0.001	0.516	0.2
Acid nitrogen deposition	1 year	Annual Mean	North York Moors SPA	<0.001	0.516	<0.1

In accordance with Environment Agency guidance, we consider that given the size of the process contribution which is an insignificant proportion of the critical level / critical load, the impact on the sites is not likely to cause significant pollution. As modelling and assessment has demonstrated that the predicted ground level environmental concentrations of pollutants even at a maximum will not compromise any air quality objectives, then we are satisfied that the proposal will not impact upon the conservation sites.

There are non-statutory conservation sites located within 2 km of the installation. The Operator has not identified these in their Air Quality Assessment but we have carried out checks to confirm that both the long-term and short-term process contributions are below the relevant criteria at these locations and therefore no further assessment is required.

We are satisfied that the proposal will not damage the special features of the non-statutory site. As there are no specific regulations for the protection of these sites (beyond our requirements to enhance biodiversity under the Natural Environment and Rural Communities Act 2006 and our wider conservation duties under the Environment Act), we are required to ensure that the permitting of the installation will not result in significant pollution.

3. Discharge to Surface Water

Water discharged from Wilton Energy Centre passes to the Wilton Site "C drain" drainage system at manhole points MHA12 and MH17/3, as illustrated on drawing WEC Drainage Plan J4391-02-GA-103 Rev 2, which in turn is discharged at the outfall into Dabholm Gut, a man made channel that runs into the River Tees, which at this point is an estuary.

The inputs are; boiler blowdown, effluent from the water pre-treatment plant that provides water for the boilers and surface water. There are no specific pollutants, priority substances, priority hazardous substances or sanitary pollutants of concern that are being discharged from these inputs. Chloride was identified as a potential concern, however as there are no annual average environmental quality standards or maximum allowable concentration environmental quality standards for chloride in estuaries then no assessment using the Environment Agency's H1 tool is required to be undertaken.

Monitoring of the effluent by Huntsman Polyurethanes (UK) Limited prior to discharge into Dabholm Gut is undertaken for; total organic compounds, benzene, ammoniacal nitrogen, mercury, cadmium and pH.

Discharge of condensed steam has been highlighted to be a risk with a 1 in 1000 year chance of occurrence. This would be discharged at a maximum rate of 25m³/h at a temperature of 60°C. The risk to the environment from this discharge is low due to its likelihood of occurrence and dilution in the Wilton site drainage system reducing the temperature to acceptable levels prior to discharge into Dabholm Gut. Alongside this there is the option to segregate the water in a number of large storage tanks managed by Huntsman to allow it to cool further, prior to being released into Dabholm Gut.

4. Chemicals Storage

The chemicals, quantities and storage containers specifications are listed below. All storage vessels will be inspected every three days and prior to offloading for leaks/damage, monitored against reorder levels, have sight panels for inspection and rain skirts installed to maintain bund capacity, with a bund volume of 110% of the volume of the tank. They are located on hardstanding and any spills would be contained within the drainage system. Spill procedures are in place that aim to contain any spills prior to emission into the sewer and Dabholm Gut. We consider that the risk of ground and water contamination is low due to the Operators procedures and equipment that will be used on site as follows:

- 14% sodium hypochlorite, 2m³ volume and constructed of uPVC / GRP.
- Sodium metabisulphite,1.5m³ volume and constructed of polypropylene.
- RO125, 0.5m³ volume and constructed of polypropylene.
- Carbohydrazide, 0.5m³ volume and constructed of polypropylene.
- Amine, 0.5m³ volume and constructed of polypropylene.
- Phosphate, 0.5m³ volume and constructed of polypropylene.

5. Improvement Conditions

Start-Up and Shutdown

Start up and shutdown timings are site specific and as the plant has not yet been commissioned then the start-up and shutdown conditions and timings are currently not known. Improvement condition (IC) 3 requires the Operator to determine a suitable start-up and shutdown time with the agreement of the Environment Agency in writing.

Gaseous Emissions Monitoring

Improvement condition 4 requires the Operator to monitor concentrations and quantities of gaseous emissions of NO_x, SO_x and CO for a minimum 12 month period in order to measure the variation in the concentrations of those pollutants being emitted. Based upon these fluctuations a monitoring plan will be submitted in writing by the Operator, that states what monitoring will be undertaken and for which pollutant.

Nitrogen Dioxide Emissions

The variability in the gases that are to be combusted in the steam raising boilers leads to variable concentrations of NO_x being emitted due to fuel bound nitrogen. The Operator has proposed a limit for NO_x of 250 mg/m³, which comes from the MCPD, however the BAT-AELs from the chemicals sector of 200 mg/m³ is deemed to be more appropriate as this is a Directly Associated Activity to a chemicals plant.

IC6 utilises the report written for IC5 in order to ensure that the NOx emission limit value of 200 mg/m³ is met by the Operator.

Destruction of VOCs

The Operator stated that the steam raising boilers and abatement can destroy >99% of the VOCs from the vent gas. IC7 has been set to measure the actual percentage destroyed, and undertake an assessment to quantify the impacts upon the environment if it is below the 99% destruction threshold.

EPR/MP3131RW/A001 Date issued: 31/07/2017

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.
	We consulted the following organisations:
	Public Health England, Redcar and Cleveland Borough Council, Health and Safety Executive, Sewage Undertakers, Local Authority – Environmental Health and Local Authority – Planning.
	The comments and our responses are summarised in the consultation section.
Operator	
Control of the facility	We are satisfied that 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 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.
	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. 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.
Biodiversity, heritage, landscape and nature	The application is within the relevant distance criteria of a site of heritage,

Aspect considered	Decision	
conservation	landscape or nature conservation, and/or protected species or habitat.	
	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.	
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.	
Environmental risk assessn	nent	
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 categorised as environmentally insignificant.	
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 Operator must use are specified in table S1.2 in the environmental permit.	
Operating techniques for emissions that screen out as insignificant	Emissions of NOx, CO and VOCs have been screened out as insignificant, and so we agree that the Operator's proposed techniques are BAT for the installation.	
	We consider that the emission limits included in the installation permit reflect the BAT for the sector.	
Permit conditions		
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.	
Improvement programme	Based on the information on the application, we consider that we need to impose an improvement programme.	
	We have imposed an improvement programme, the reasons for which are stated in the improvement conditions section of the key issues.	
Emission limits	ELVs based on the Chemical Bref have been set for the following substances:	
	NO _x – 200 mg/Nm ³	

Aspect considered	Decision	
	VOCs – no limit	
	SO ₂ – 100 mg/Nm ³	
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified. The monitoring frequencies are discussed in further detail in the key issues section.	
	These monitoring requirements have been imposed in line with BAT in order to ensure that the Operator is able to demonstrate that they can meet their emission limit values for NO _x .	
Reporting	We have specified reporting in the permit.	
	Quarterly reporting for gaseous emissions during 1st 12 months, which will be reviewed after submission of a report on the monitoring results.	
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.	
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 vary 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

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

Redcar and Cleveland Borough Council

Brief summary of issues raised

Redcar and Cleveland Borough Council are not aware of any noise or amenity issues surrounding the proposed installation site which could have an impact upon the permit application. There are currently no enforcement actions outstanding on the proposed installation site.

Summary of actions taken or show how this has been covered

No action required.

Response received from

Public Health England

Brief summary of issues raised

Products of combustion, however these have been shown to be below both the short and long term Environmental Assessment Levels and Air Quality Standards, therefore no significant concerns.

Summary of actions taken or show how this has been covered

No action required.