

Determination of an Application for an Environmental Permit under the Environmental Permitting (England & Wales) Regulations 2016

Consultation on our draft decision document recording our decision-making process

The permit number is: EPR/QP3539LE
The Operator is: Saltend Cogeneration Company Limited
The Installation is: Saltend Cogeneration Plant

The variation number is EPR/QP3539LE/V011

What this document is about

This is a draft decision document, which accompanies a draft consolidated variation notice.

This draft decision document provides a record of the decision making process. It summarises the decision-making process to show how the main relevant factors have been taken into account. We have assessed the aspects that are changing as part of this variation, we have not revisited any other sections of the permit.

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

- Highlights key issues in the determination.
- Summarises the derogation decision making process to show how the main relevant factors have been considered

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

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Table of Contents

1. Our proposed decision.....	3
2. How we reached our draft decision.....	3
Assessing an application made by the operator	3
Requesting information about Medium Combustion Plant (MCP) on the installation	3
3. Key issue of the decision	3
Ensuring compliance with the IED and LCP BAT conclusions	3
Ensuring the Installation complies with the MCPD	3
4. Review and assessment of the regulation 61 notice concerning MCPs.....	4
5. Review and assessment of the derogation request made by the operator in relation to BAT Conclusions which include an associated emission level (AEL) value.....	4
Introduction.....	4
Growth duty	5
Cost benefit analysis (CBA).....	5
Impacts.....	5
Conclusion.....	6
6. Annexes.....	7
Annex 1 Consultation responses on application.....	7

1. Our proposed decision

We are minded to grant a consolidated variation notice to the operator that;

- Increases the annual NO_x emission limit value from 40 mg/m³ to 50 mg/m³, on a time-limited basis.
- Includes the requirements of the Medium Combustion Plant Directive (MCPD) for 2025.

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.

2. How we reached our draft decision

Assessing an application made by the operator

The Operator applied for a derogation from a Best Available Technique (BAT) Associated Emission Level (BAT-AEL) described in the Large Combustion Plant (LCP) BAT Conclusions Document (2017), as provisioned by Article 15(4) of the Industrial Emissions Directive (IED).

Requesting information about Medium Combustion Plant (MCP) on the installation

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 08/07/2022 requiring the Operator to provide information relating to the operation of MCP.

3. Key issue of the decision

Ensuring compliance with the IED and LCP BAT conclusions

In relation to the LCP BAT 42, the operator applied for a time-limited derogation to increase the permitted annual NO_x ELV from 40 mg/m³ to 50 mg/m³.

We reviewed the application and agreed to set the higher annual NO_x emissions limit values, on a time-limited basis.

We are satisfied that the installation will meet the BAT-AEL associated with BAT 42, by the end of 2028.

Further information is in section 4 of this decision document.

Ensuring the Installation complies with the MCPD

The site operates 5 MCPs, all of which are rated at 6MWth. These are emergency back-up generators.

We have reviewed the operator's response to the regulation 61 notice.

We are satisfied that the Installation will meet the requirements of the MCPD.

Further information is in section 5 of this decision document

4. Review and assessment of the regulation 61 notice concerning MCPs

The MCPs have previously been assessed and permitted, prior to the publication of the MCPD.

The MCPs are emergency generators and operate for less than 500 hours per annum, therefore no emission limit values have been set.

Monitoring requirements from the MCPD have been included, for plants rated at ≥ 20 MWth.

The permit requires the measured emissions to be reported.

5. Review and assessment of the derogation request made by the operator in relation to BAT Conclusions which include an associated emission level (AEL) value

The IED enables a competent authority to allow derogations from BAT AELs stated in BAT Conclusions under specific circumstances as detailed under Article 15(4):

By way of derogation from paragraph 3, and without prejudice to Article 18, the competent authority may, in specific cases, set less strict emission limit values. Such a derogation may apply only where an assessment shows that the achievement of emission levels associated with the best available techniques as described in BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to:

(a) the geographical location or the local environmental conditions of the installation concerned; or

(b) the technical characteristics of the installation concerned.

Introduction

Derogation from NO_x BAT AEL, associated with BAT 42 of the LCP BAT Conclusions

The BAT-AEL for the existing gas turbines is 40 mg/m³ NO_x as an annual average.

The operator provided information to demonstrate that meeting this BAT-AEL has disproportionate costs, based on *the technical characteristics of the installation*.

The operator applied to increase their permitted NO_x emission limit to 50 mg/m³, as an annual average.

The operator proposes to meet the BAT-AEL, with the fitting of new combustors. New combustors have been designed, ordered, and planned to be fitted, when available and in line with planned shutdowns.

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.

Cost benefit analysis (CBA)

The operator provided a cost benefit analysis. The operator claimed that the CBA was commercially confidential, on the basis that contract costs were included. We agreed the details of the CBA was commercially confidential and have not placed this on the Public Register.

In the CBA, the proposed derogation is the preferred option. This is indicated by a large difference in the Net Present Value (NPV) between the proposed derogation and the BAT-AEL scenario.

In all costed areas, upfront costs, operating costs, air pollutant emissions and greenhouse gas emissions of the proposed derogation have lower costs than the other scenarios.

The results are mostly driven by the large social cost created by the elevated levels of greenhouse gas emissions in the Business-as-Usual (BAU) scenario and the BAT scenario (which uses BAU emissions until the installation of the combustors is complete).

Impacts

The operator agreed to limited hours in the permit.

The operator remodelled the emissions using the reduced hours scenario.

Whilst the derogated NO_x annual emissions limit of 50 mg/m³, is in place, the permit limits the operation of the gas turbines to a combined total of 17,790 hours on an annual basis.

Air Quality Report: Human Receptors

- Assessments against long-term ES show a slight decrease in impact.

- Assessments against short-term ES show a slight increase in impact (PC increased by 2% of the limit – all receptors screen out).

Air Quality Report: Ecological Receptors

- Assessments against long-term ES show a slight decrease in impact.
- Assessments against short-term ES show a slight increase in impact (PC increased by 1% of the limit – all receptors screen out).

The overall impacts of emissions, from increasing the NO_x ELV to 50 mg/m³ alongside reduced operational hours, provide a benefit to receptors where the long-term air quality objectives and limits apply.

For short-term air quality objectives and limits, it is considered that the impact on existing sensitive humans is not significant, whilst 'no likely significant effects (alone and in-combination)' for European sites and 'no likely damage' for modelled local wildlife sites is determined.

Conclusion

We have decided to allow a time-limited derogation for each gas turbine. The permit will list an annual NO_x ELV of 50 mg/m³.

For each gas turbine, the derogation will end as listed below:

- Unit One – 31st December 2026
- Unit Three – 31st December 2027
- Unit Two – 31st December 2028

For avoidance of doubt, for each gas turbine, the BAT-AEL of 40 mg/m³, as an annual average, will apply, as listed below

- Unit One – 1st January 2027
- Unit Three – 1st January 2028
- Unit Two – 1st January 2029

Review and assessment of the derogation request made by the operator in relation to BAT Conclusions which include an associated emission level (AEL) value.

6. Annexes

Annex 1 Consultation responses on application

The following statutory and non-statutory bodies were consulted on the application made by the operator.

- Local Authority – Environmental Protection Department
- Local Authority – Planning
- Director of PH/UKHSA
- Health and Safety Executive

No significant concerns or objections were raised, based on there being no likely breach of any human health or air quality objectives.