# **Permitting decisions**



## **Bespoke permit**

We have decided to grant the permit for MPR – Mitchells Industrial Park operated by Mercia Power Response Limited.

The permit number is JP3204MN.

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 into 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

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

#### Air quality

This is a complex bespoke Medium Combustion Plant/Specified Generator application. In line with the Environment Agency's guidance (https://www.gov.uk/guidance/specified-generators-dispersion-modelling-assessment and https://www.gov.uk/guidance/medium-combustion-plant-apply-for-an-environmental-permit#apply-for-a-bespoke-permit), we require applicants to submit detailed air dispersion modelling and impact assessment to assess the predicted impacts on human receptors (for example dwellings, work places and parks) and ecological sites, as appropriate.

A methodology for risk assessment of point source emissions to air is set out in our guidance https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit.

The applicant provided an assessment of the impact of emissions to air with the application which is detailed in document "Main Supporting Document – Mitchells Industrial Park MCP/SG permit application, Appendix A – Environmental Risk Assessment", reference 100412074/40/A and dated 9/11/2021.

We have reviewed the assessment and are satisfied that it has taken into account all relevant ecological and human health receptors, that the model and its inputs are appropriate and that the assessment has been carried out in accordance with our guidance.

#### Human Health

The operator has provided detailed atmospheric dispersion modelling which predicts the likely impacts of emissions of oxides of nitrogen (as these are the pollutants relevant to natural gas fired engines) at gridded and discrete receptors.

The relevant Environmental Quality Standards (EQS) for NOx for human health are:

- 200 µ/m<sup>3</sup> short term (as an hourly average)
- 40 µg/m<sup>3</sup> long term (as an annual average)

#### The air quality modelling assessment

Gridded receptors

a) Short term

The maximum process contribution (PC) was  $304.5 \ \mu g/m^3$  or 152.2% of the EQS. As this is greater than 10% of the short term EQS it cannot be screened out.

The maximum predicted environmental concentration (PEC) was 322.1  $\mu$ g/m<sup>3</sup> or 161% of the EQS. However contour plots show the maximum hourly PCs are to the south west of the proposed development, within an area of vegetation with low amenity value bordering the Mitchell's Industrial Park. While a member of the public would have access to this area as there is a public footpath nearby, it is not expected that this is an area where a member of the public would be exposed for a significant portion of the averaging time of the standard (one hour). This is because this area is not a park or amenity area, but a cut-through from Bradbury Balk Lane to the Netherwood Country Park.

Within the Netherwood Country Park (the nearest area of relevant public exposure), the contours demonstrate maximum hourly PECs of between 50  $\mu$ g/m<sup>3</sup> to 100  $\mu$ g/m<sup>3</sup>. Considering the conservative assumptions used in the assessment, and that there is no relevant exposure where the PEC is greater than the EQS, the impact at gridded receptors is considered to be insignificant with respect to hourly concentrations.

b) Long term

The maximum PC was 24.6  $\mu$ g/m<sup>3</sup> or 61.5% of the EQS.

However, the maximum PEC was  $33.5 \ \mu g/m^3$  or 83.7% of the EQS. As this is below the EQS it can be considered insignificant. Additionally the maximum offsite annual PCs are found close to the southern boundary of the site on the road through the industrial park. The annual EQS would not apply at this location (see Table 2.2 of assessment) as there is no relevant public exposure, further demonstrating that the impact at gridded receptors is insignificant with respect to annual concentrations.

Discrete human health receptors

a) Short term

The hourly mean PCs at five human health receptors are above 10% of the EQS and therefore cannot been screened out as insignificant (Table 5.3 of assessment).

However, at all modelled receptors, the hourly PECs are below the hourly EQS when it is conservatively assumed the site will be operating continuously all year. Therefore, the short term impacts at human health receptors are considered insignificant with respect hourly concentrations.

b) Long term

For the annual mean, PCs are greater than 1% of the EQS at multiple modelled receptors, as shown in Table 5.4 of the assessment. However, the annual PECs at all modelled receptors are below the annual EQS, so the impact of the site on human health receptors is also considered insignificant with respect to annual concentrations.

We have conducted our own simple audit of the percentage process contribution and predicted environmental concentration submitted by the operator and as a result we do not disagree with the operators conclusions with regard to human health.

#### **Ecological receptor (proposed SSSI)**

NOx has been considered as the pollutant of concern for combustion of natural gas.

The relevant EQS for the proposed SSSI are:

- 30 µg/m3 long term (annual average)
- 75 µg/m3 short term (24 hour average)

The maximum predicted long term PC is  $0.3 \ \mu g/m^3$  which is below 1% of the relevant EQS so can be considered insignificant.

The maximum predicted short term PC is 5.4  $\mu$ g/m<sup>3</sup> which is below 10% of the relevant EQS so can be considered insignificant.

We agree with the applicant's conclusion that emissions from the proposal are unlikely to damage the interest features of the proposed Dearne Valley Wetlands SSSI.

# **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.	
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	The operator has provided the grid reference for the emission points from the medium combustion plants/specified generator and the activities are defined in table S1.1 of the permit.	
The site		
Biodiversity, heritage, landscape and nature conservation	The application is not within the relevant distance criteria of a European site (SPA, SAC), Ramsar site or SSSI. However it is within 750m of the proposed Dearne Valley Westlands SSSI.	
	We have assessed the application and its potential to affect all known sites of nature conservation or habitats identified in the nature conservation screening report as part of the permitting process.	
	We have assessed the operator's air emissions impact modelling report and consider that emissions will not affect any sites of nature conservation or habitats identified. See Key Issues section above.	
	We have not consulted Natural on the application. The decision was taken in accordance with our guidance.	
Environmental risk assessment		
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 [or similar methodology supplied by the operator and reviewed by ourselves], all emissions may be categorised as	

Aspect considered	Decision
	environmentally insignificant.
	The applicant's assessment of predicted impacts at sensitive receptors is based on the operating hours of 6,188 per engine as proposed by the applicant and included in the modelling. We have included these operating hours in the permit (table S1.1) as the modelling shows that, at these operating hours, emissions are environmentally insignificant. See <u>key issues</u> section above.
Operating techniques	
Operating techniques	We have specified the operating techniques and the operator must use the operating techniques specified in table S1.2A and table S1.2B of the permit.
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.
Emission limits	An ELV has been set for NOx of 95 mg/Nm <sup>3</sup> which reflects the tighter limits required for MCPs under Schedule 25A. This was also the emission value used in the air quality modelling assessment.
	We made these decisions in accordance with MCP and SG technical guidance
	Medium Combustion Plant guidance: <u>https://www.gov.uk//guidance/medium-</u> <u>combustion-plant-and-specified-generator-permits-how-to-comply</u>
	Specified Generator Guidance <u>https://www.gov.uk//guidance/medium-</u> combustion-plant-and-specified-generator-permits-how-to-comply
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.
	These monitoring requirements have been imposed in order for the operator to demonstrate compliance with the emission limits specified in the permit. The operator will carry out monitoring in accordance with the relevant MCERTS methods.
	We made these decisions in accordance with MCP and SG technical guidance
	Medium Combustion Plant guidance: <u>https://www.gov.uk//guidance/medium-</u> <u>combustion-plant-and-specified-generator-permits-how-to-comply</u>
	Specified Generator Guidance <u>https://www.gov.uk//guidance/medium-</u> combustion-plant-and-specified-generator-permits-how-to-comply
Reporting	We have specified reporting in the permit.
	We made these decisions in accordance with the MCP and SG technical guidance;
	Medium Combustion Plan Guidance: <u>https://www.gov.uk//guidance/medium-</u> combustion-plant-and-specified-generator-permits-how-to-comply
	Specified Generator Guidance: <u>https://www.gov.uk//guidance/medium-</u>

Decision
combustion-plant-and-specified-generator-permits-how-to-comply
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.
The Case Management System 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.
There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
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.