

# FICHTNER

Consulting Engineers Limited

**CONRAD ENERGY (HOLDINGS)  
LIMITED**



**CHATTERLEY**

**MCP APPLICATION PACK**

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## NON-TECHNICAL SUMMARY

Conrad Energy (Holdings) Limited ("Conrad Energy") is applying for an Environmental Permit for a Medium Combustion Plant (MCP) for the Chatterley facility ("the Facility").

The Facility will comprise eight spark-ignition gas engines at Chatterley, Stoke-on-Trent. Each engine will have a rated thermal input of approximately 6.0 MW<sub>th</sub> and an electrical output of 2.5 MW<sub>e</sub>. Therefore, the Facility will have an aggregated rated thermal input of approximately 47.7 MW<sub>th</sub>.

The Facility is not eligible for a Standard Rules permit as it has an aggregated thermal input of greater than 20 MW<sub>th</sub>. The Environment Agency's Screening Tool has been completed. This indicates that the application will be a complex bespoke application. Therefore, a detailed dispersion modelling assessment is included with this application.

The Facility is subject to a Capacity Agreement resulting from the 2016 T-4 capacity auction. From 1<sup>st</sup> October 2020 the engines will be contracted to supply 20MW of electrical output when requested to by National Grid under a System Stress Event. Therefore, the Facility is classified as a Tranche B Specified Generator and will require a permit to operate from 1<sup>st</sup> January 2019.

In accordance with the planning permissions for the Facility, it will operate up to a maximum of 2,500 hours per year. However, the operating envelope will be all 8,760 hours in the year. Typical operation is expected to be approximately 2,000 hours per annum.

Each gas engine will have a dedicated 6m stack. Emissions from each engine will be released from each stack. Detailed air dispersion modelling of emissions from the stacks has been undertaken. This has demonstrated that the impact of emissions to air will not have a significant impact on local air quality and that the proposed operation will not have a significant impact upon sensitive ecological and human receptors.

Emissions to air from the Facility will comply with an emission limit of 95 mg/Nm<sup>3</sup> (expressed at 15% reference oxygen content).

The Facility will be operated in accordance with a documented management system.

The following Annexes are enclosed with this application:

- Annex 1 - Application Forms A, B2.5 and F;
- Annex 2 - Specified Generator Tranche B Screening Tool;
- Annex 3 - Cost benefit analysis (CBA) screening; and
- Annex 4 - Air Quality Assessment.

Annex 1 – [Application Forms](#)

Annex 2 – [Specified Generator Tranche B Screening Tool](#)

Annex 3 – [CBA Screening](#)

Annex 4 – [Air Quality Assessment](#)





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